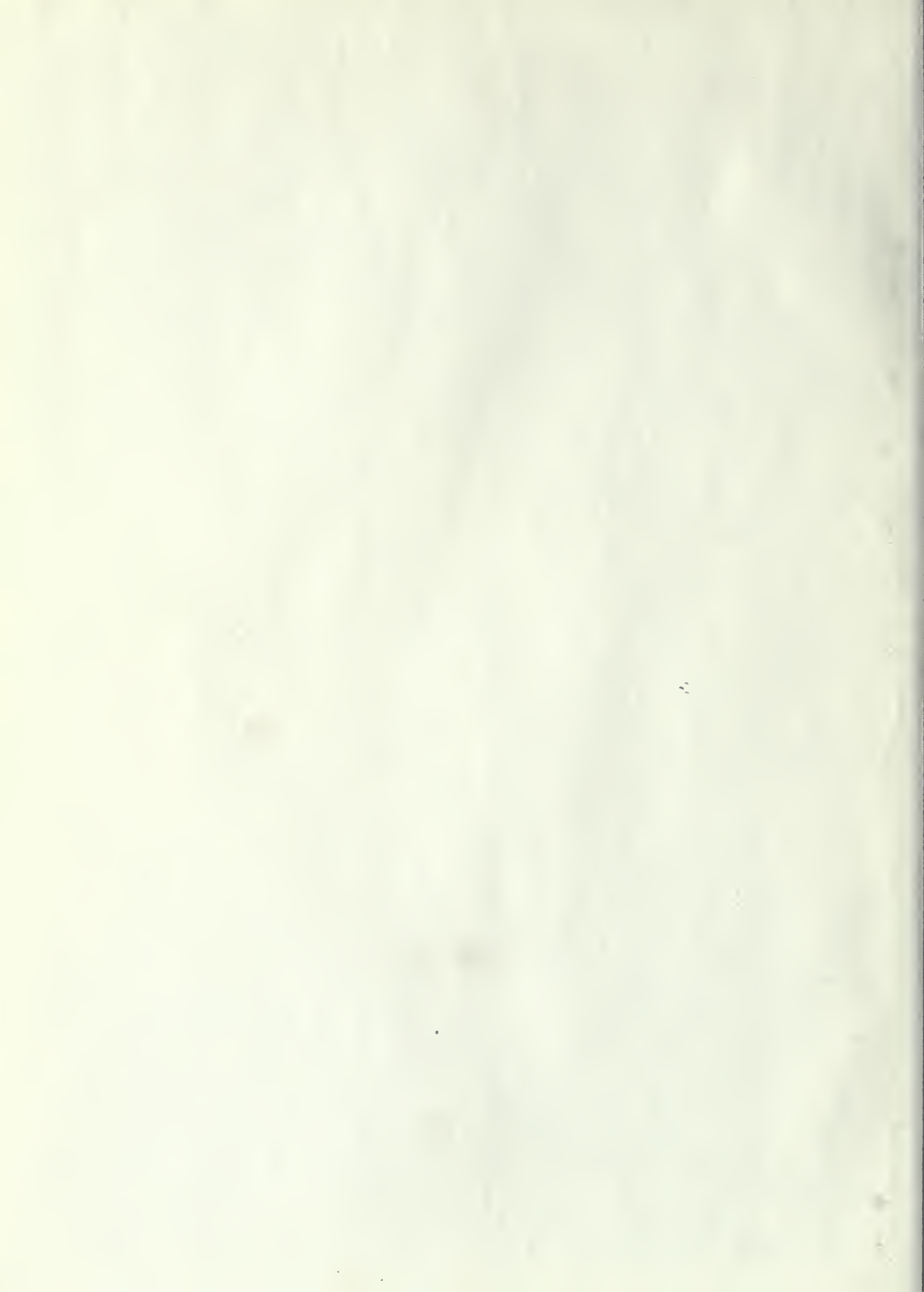


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BULLETIN No. 130-68

HYDROLOGIC DATA: 1968

Volume V: SOUTHERN CALIFORNIA

- Appendix D: SURFACE WATER QUALITY
- Appendix E: GROUND WATER QUALITY
- Appendix F: WASTE WATER DATA

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Appendix E: GROUND WATER QUALITY

Appendix F: WASTE WATER DATA

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BULLETIN No. 130

HYDROLOGIC DATA
AREAL COVERAGE OF VOLUMES

Each Volume Contains

- Appendix A: Climatological Data
- Appendix B: Surface Water Measurements
- Appendix C: Ground Water Measurements
- Appendix D: Surface Water Quality
- Appendix E: Ground Water Quality
- Appendix F: Waste Water Data

This Volume 



FOREWORD

The data collection programs of the Department of Water Resources have been designed to supplement the activities of other agencies to satisfy specific needs of the State. Bulletin No. 130-68 presents useful, comprehensive, accurate, and timely hydrologic data which are prerequisite for effective planning, design, construction, and operation of water facilities.

The Bulletin No. 130 series is published annually in five volumes. Each volume presents hydrologic data for one of five reporting areas of the State. These areas are delineated on the map to the left.

William R. Gianelli

William R. Gianelli, Director
Department of Water Resources
The Resources Agency
State of California
December 2, 1969

METRIC CONVERSION TABLE

ENGLISH UNIT	EQUIVALENT METRIC UNIT
Inch (in)	2.54 Centimeters
Foot (ft)	0.3048 Meter
Mile (mi)	1.609 Kilometers
Acre	0.405 Hectare
Square mile (sq. mi.)	2.590 Square kilometer
U. S. gallon (gal)	3.785 Liters
Acre-foot (acre-ft)	1,233.5 Cubic meters
U. S. gallon per minute (gpm)	0.0631 Liters per second
Cubic feet per second (cfs)	1.7 Cubic meters per minute
1 part per million (ppm)	1 milligram per liter (mg/l)
1 part per billion (ppb)	1 microgram per liter (ug/l)
1 part per trillion (ppt)	1 nanogram per liter (ng/l)
1 equivalent per million (epm)	1 milliequivalent per liter (me/l)

TABLE OF CONTENTS

	<u>Page</u>
AREAL COVERAGE OF VOLUMES	ii
FOREWORD	iii
METRIC CONVERSION TABLE	iv
ORGANIZATION	vii
ACKNOWLEDGMENTS	ix
ABSTRACT	x

APPENDIXES

Appendix A: CLIMATOLOGICAL DATA)	
Appendix B: SURFACE WATER MEASUREMENTS) (Published Separately)	
Appendix C: GROUND WATER MEASUREMENTS)	
Appendix D: SURFACE WATER QUALITY	1

FIGURES

Figure
Number

D	Location of Surface Water Sampling Stations	
D-1	Central Coastal Drainage Province (T)	5
D-2	Los Angeles Drainage Province (U)	7
D-3	Lahontan Drainage Province (W)	9
D-4	Colorado River Basin Drainage Province (X)	11
D-5	Santa Ana Drainage Province (Y)	13
D-6	San Diego Drainage Province (Z)	15

TABLES

Table
Number

D-1	Sampling Station Data and Index	16
D-2	Mineral Analyses of Surface Water	18
D-3	Miscellaneous Constituents in Surface Water	40
Appendix E: GROUND WATER QUALITY		57

FIGURES

Figure
Number

E	Names and Areal Code Numbers of Hydrologic Areas	
E-1	Central Coastal Drainage Province (T)	63
E-2	Los Angeles Drainage Province (U)	65

FIGURES (Continued)

E-3	Lahontan Drainage Province (W)	67
E-4	Colorado River Basin Drainage Province (X)	69
E-5	Santa Ana Drainage Province (Y)	71
E-6	San Diego Drainage Province (Z)	73

TABLES

Table
Number

E-1	Mineral Analyses of Ground Water	74
E-2	Trace Element Analyses of Ground Water	160
Appendix F: WASTE WATER DATA		171

FIGURES

Figure
Number

F	Waste Water Dischargers	
F-1	Central Coastal Region (No. 3)	175
F-2	Los Angeles Region (No. 4)	177
F-3	Lahontan Region (No. 6)	179
F-4	Colorado River Basin Region (No. 7)	181
F-5	Santa Ana Region (No. 8)	183
F-6	San Diego Region (No. 9)	185

TABLES

Table
Number

F-1	Summary, Quantity of Waste Water Discharged and Reused, Southern California	186
F-2	Quantity of Waste Water Discharged and Reused, Southern California	187
F-3	Mineral Analyses of Waste Water	197

State of California
The Resources Agency
DEPARTMENT OF WATER RESOURCES

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WILLIAM R. GIANELLI, Director, Department of Water Resources
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Long Beach Water Department
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Los Angeles County Health Department
City of Los Angeles Department of Water and Power

Orange County Department of Agriculture
Orange County Flood Control District
Pomeroy and Associates Laboratory
Riverside County Flood Control and
Water Conservation District
San Bernardino County Flood Control District

San Luis Obispo County Flood Control and
Water Conservation District
The Metropolitan Water District of Southern
California
United States Geological Survey
United Water Conservation District, Ventura
County
University of California at Riverside

ABSTRACT

Appendixes D and E to Volume V, Bulletin 130-68, contain tables showing data on surface and ground water quality in Southern California for the 1967-68 water year. Appendix F contains tables showing data on waste water quantity, quality, and reuse in Southern California for the same period. Figures show location of surface water sampling stations, ground water basins, and waste water dischargers.

Appendix D

SURFACE WATER QUALITY

Appendix D

SURFACE WATER QUALITY

This appendix presents surface water quality data collected during the period from October 1, 1967, through September 30, 1968. The data were collected from 60 stream and lake sampling stations in Southern California in cooperation with other state, local and federal agencies.

These stations are listed in Table D-1 and the locations of the stations are shown in Figure D-1 through D-6. Water quality sampling stations have been identified by an eight-digit number, i.e., Z-6-1300.00. The first digit designates the area in which the station is located. The second digit designates river basin or valley floor. The third digit designates the particular stream or reach of stream in the river basin, the next five digits are numbers assigned to the particular station. Station numbers have been assigned according to the Department of Water Resources, "Index of Stream Gaging Stations in and Adjacent to California, 1966". At the time of field sampling, dissolved oxygen, pH, and water temperature are determined; an estimate of the flow is made; and the gage height and time are noted. Comments on local conditions are noted in field books which are available in the files of the Department of Water Resources, Southern District.

The mineral constituents were determined in accordance with methods described in "Standard Methods for the Examination of Water and Waste Water", prepared and published jointly by the American Public Health Association, American Water Works Association, and Water Pollution Control Federation, 12th Edition, 1965. In some cases, the methods used were those presented in the U. S. Geological Survey Water Supply Paper 1454, "Methods for Collection and Analysis of Water Samples", 1960.

SURFACE WATER SAMPLING STATIONS

CENTRAL COASTAL DRAINAGE PROVINCE (T)

- D-3-1450.00. Salinas River at Paso Robles
- D-3-1475.00. Paso Robles Creek at Templeton
- D-3-1590.00. Santa Margarita Creek Below Highway at Santa Margarita
- D-3-3520.00. Nacimiento River Near San Miguel
- D-5-1100.00. Arroyo De La Cruz Near San Simeon
- D-5-2010.00. Santa Rosa Creek at Cambria
- D-5-5000.00. Old Creek Above Whale Rock Dam Near Cayucos
- D-5-6005.00. Toro Creek Above Highway 1 Near Cayucos
- D-6-3050.00. Cuyama River Near Garey
- D-8-1440.00. Santa Ynez River Near Solvang
- D-8-1565.00. Lake Cachuma Near Santa Ynez



LOCATION OF SURFACE WATER SAMPLING STATIONS
CENTRAL COASTAL DRAINAGE PROVINCE (T)

SURFACE WATER SAMPLING STATIONS

LOS ANGELES DRAINAGE PROVINCE (U)

Z-1-1100.00. Ventura River Near Ventura
Z-1-5500.00. Matilija Creek Above Dam
Z-2-1300.00. Santa Paula Creek Near Santa Paula
Z-2-1360.10. Santa Clara River Near Santa Paula
Z-2-2150.00. Sespe Creek Near Fillmore
Z-2-3240.00. Piru Creek Below Santa Felicia Dam
Z-2-3375.00. Piru Lake Near Piru
Z-3-1135.00. Santa Clara River at Los Angeles-Ventura County Line
Z-6-1100.00. Los Angeles River at Pacific Coast Highway
Z-6-1300.00. Los Angeles River at Figueroa Street
Z-6-1850.00. Los Angeles Aqueduct Near San Fernando
Z-6-9780.00. Rio Hondo Above Spreading Grounds
Z-7-1100.90. San Gabriel River at Whittier Narrows
Z-7-1927.10. San Gabriel River at Azusa Powerhouse
Z-7-5100.00. Rio Hondo at Whittier Narrows
Z-7-6150.00. Mission Creek at Whittier Narrows
W-2-1985.05. Colorado River Aqueduct (Upper Feeder) at La Verne

LEGEND

● Z-9-1620.00' SURFACE WATER SAMPLING STATION AND NUMBER (SEE PAGE TO THE LEFT)

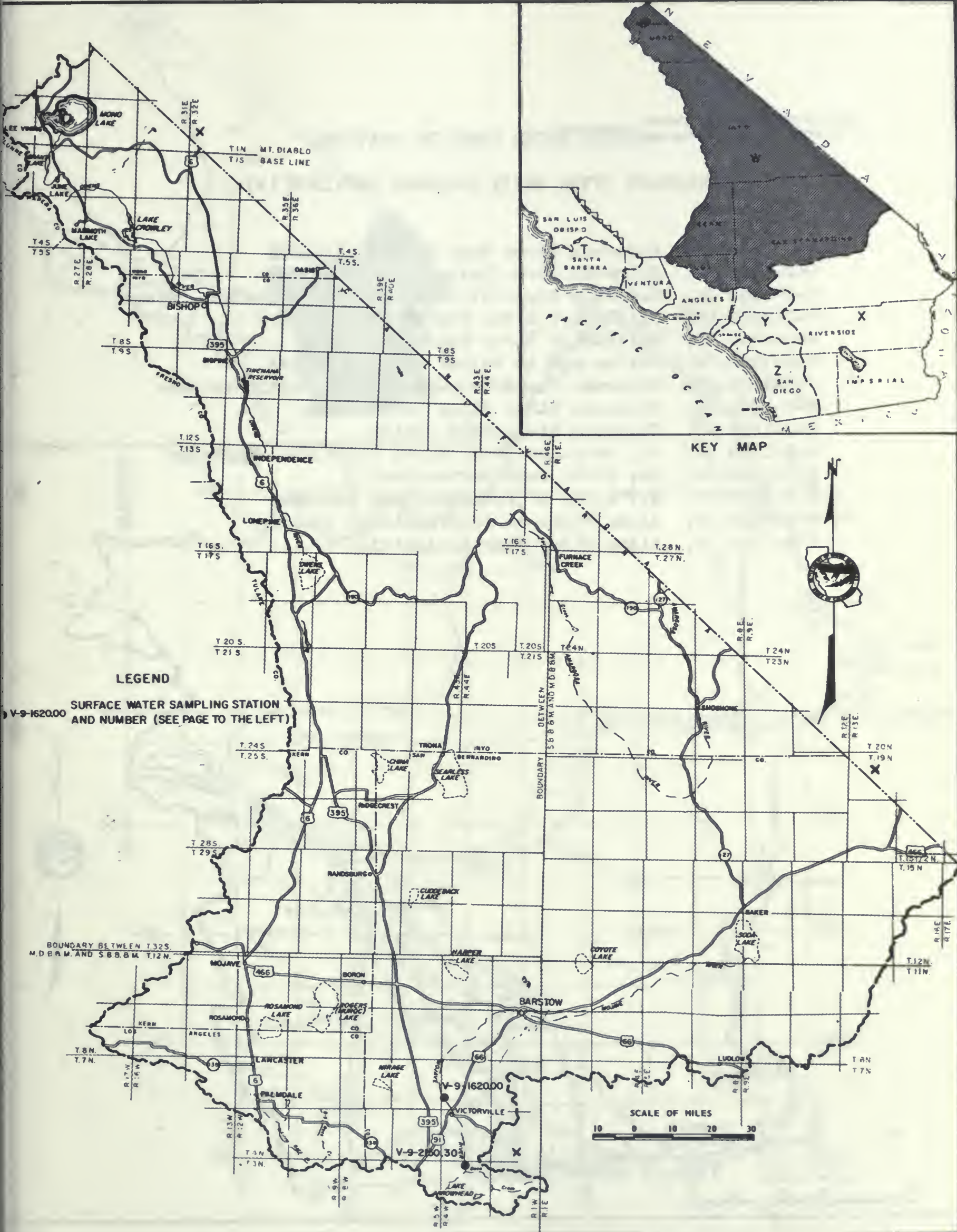


LOCATION OF SURFACE WATER SAMPLING STATIONS
LOS ANGELES DRAINAGE PROVINCE (U)

SURFACE WATER SAMPLING STATIONS

LAHONTAN DRAINAGE PROVINCE (W)

- V-9-1620.00. Mojave River Near Victorville
- V-9-2150.30. Mojave River at the Forks
- V-9-2200.00. Mojave River West Fork Below Cedar Springs
- V-9-2250.00. Mojave River East Fork of the West Fork
- V-9-2300.00. Mojave River West Fork Above Cedar Springs



LOCATION OF SURFACE WATER SAMPLING STATIONS
 LAHONTAN DRAINAGE PROVINCE (W)



SURFACE WATER SAMPLING STATIONS

COLORADO RIVER BASIN DRAINAGE PROVINCE (X)

- W-2-1530.00. Colorado River Near Topock, Arizona
- W-2-1775.10. Colorado River Below Parker Dam
- W-2-1960.00. Colorado River at Colorado River Aqueduct Intake
- W-3-1070.00. Whitewater River Near Mecca
- W-3-1450.00. Whitewater River Near Whitewater
- W-5-1600.70. Salton Sea at Salton Sea State Park
- W-7-1695.00. Colorado River Below Yuma Main Canal Wasteway
- W-7-1750.00. Colorado River Below Morelos Dam
- W-7-1870.05. Colorado River Near Blythe
- W-7-1929.00. All American Canal Above Pilot Knob Wasteway
- W-9-1100.00. New River Near Westmorland
- W-9-1800.00. New River at International Boundary
- W-9-2020.00. Alamo River at International Boundary
- W-9-2100.00. Alamo River Near Calipatria



SURFACE WATER SAMPLING STATIONS

SANTA ANA DRAINAGE PROVINCE (Y)

- Y-1-1550.00. Santa Ana River Below Prado Dam
- Y-2-1210.05. Chino Creek Near Chino
- Y-4-1100.00. Warm Creek Near Colton
- Y-5-1080.00. Santa Ana River at Colton
- Y-5-1978.00. Santa Ana River Number One Tailrace Near Mentone
- Y-6-1225.00. Santa Ana River Near Norco
- Y-6-1400.00. Santa Ana River Near Arlington
- Y-7-1145.00. San Timoteo Creek at Waterman Avenue Near San Bernardino
- Y-8-2200.00. Lake Elsinore at State Park

LEGEND

● Y-5-1978.00 SURFACE WATER SAMPLING STATION AND NUMBER (SEE PAGE TO THE LEFT)



KEY MAP



LOCATION OF SURFACE WATER SAMPLING STATIONS
SANTA ANA DRAINAGE PROVINCE (Y)

SURFACE WATER SAMPLING STATIONS

SAN DIEGO DRAINAGE PROVINCE (Z)

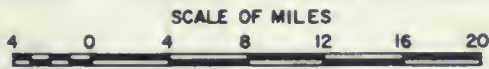
- X-2-1350.00. Santa Margarita River Near Fallbrook
- X-4-3400.05. Escondido Creek Near Harmony Grove
- X-5-1230.30. San Diego River at Old Mission Dam
- X-6-2020.05. Spring Valley Creek Near La Pressa



LOCATED BY GIBSON ET AL. (1961)
FROM THE SAN DIEGO COUNTY WATER CONTROL DISTRICT

LEGEND

● X-9-1620.00 SURFACE WATER SAMPLING STATION AND NUMBER (SEE PAGE TO THE LEFT)



LOCATION OF SURFACE WATER SAMPLING STATIONS SAN DIEGO DRAINAGE PROVINCE (Z)

TABLE D-1
SAMPLING STATION DATA AND INDEX
SOUTHERN CALIFORNIA

Station	Station number	Location*	Beginning of record	Frequency of sampling	Analyses on page
Alamo River					
At International Boundary	W-9-2020.00	17S/16E-18F	February 1951	Bimonthly	34, 51
Near Calipatria	W-9-2100.00	11S/13E-22G	March 1951	Bimonthly	34, 52
Arroyo De La Cruz					
Near San Simeon	D-5-1100.00	25S/06E ***	November 1950	Annually	19
All American Canal					
Above Pilot Knob Wasteway	W-7-1929.00	16S/21E-24K	May 1953	Bimonthly	33, 51
Chino Creek					
Near Chino	Y-2-1210.05	03S/8W-36R	April 1952	Monthly	35, 52, 53
Colorado River Aqueduct					
Upper Feeder at La Verne	W-2-1985.05	01S/09W-06	April 1951	M-Composite	30, 31
At Colorado River Intake (Lake Havasu)	W-2-1960.00	03N/27E-28	November 1953	Monthly	30
Colorado River					
Near Topock, Arizona	W-2-1530.00	07N/24E-08	April 1951	Semiannually	29, 49
Below Parker Dam	W-2-1775.10	02N/27E-16	April 1951	Semiannually	29, 49
Near Blythe	W-7-1870.05	07S/23E-02	May 1953	Monthly	32, 33, 51
Below Yuma Main Canal Wasteway	W-7-1695.00	16S/23E-26	January 1967	Bimonthly	32, 50
Below Morelos Dam	W-7-1750.00	08S/24W-28**	May 1953	Monthly	32, 50
Cuyama River					
Near Garey	D-6-3050.00	10N/32W-18M	October 1958	Monthly	19, 41
Escondido Creek					
Near Harmony Grove	X-4-3400.05	12S/2W-30K	March 1951	Bimonthly	38, 56
Lake Cachuma					
Near Santa Ynez	D-8-1565.00	06N/29W-19M	April 1958	Monthly	20, 41
Lake Elsinore					
At State Park	Y-8-2200.00	06S/5W-02J	February 1952	Bimonthly	38, 55
Los Angeles Aqueduct					
Near San Fernando	Z-6-1850.05	03N/15W-30	April 1951	Monthly	25, 46
Los Angeles River					
At Figueroa Street	Z-6-1300.00	01S/13W-15	April 1951	Monthly	24, 25, 45, 46
At Pacific Coast Highway	Z-6-1100.00	04S/13W-26	April 1951	Monthly	24, 44, 45
Matilija Creek					
Above Dam	Z-1-5500.00	05N/23W-19P	May 1953	Monthly	21, 42
Mission Creek					
At Whittier Narrows	Z-7-6150.00	02S/11W-06G	April 1951	Monthly	27, 28, 48
Mojave River					
West Fork Above Cedar Springs	V-9-2300.00	02N/5W-2	April 1965	Monthly	29
East Fork of the West Fork	V-9-2250.00	02N/4W-10	April 1965	Monthly	29
West Fork Below Cedar Springs	V-9-2200.00	03N/4W-32	May 1965	Monthly	28, 29
At The Forks	V-9-2150.30	03N/3W-18Q	July 1957	Monthly	28, 49
Near Victorville	V-9-1620.00	06N/4W-29Q	March 1951	Monthly	28, 49
Nacimiento River					
Near San Miguel	D-3-3520.00	25S/11E-4***	December 1957	Three/year	19
New River					
At International Boundary	W-9-1800.00	17S/14E-14Q	April 1951	Bimonthly	33, 51
Near Westmorland	W-9-1100.00	12S/13E-19R	February 1951	Bimonthly	33, 51
Old Creek					
Above Whale Rock Dam Near Cayucos	D-5-5000.00	28S/10E-26***	February 1961	Annually	19
Paso Robles Creek					
At Templeton	D-3-1475.00	27S/12E-31***	1940	Annually	19

*Township, range, section and 40-acre tract number; referred to San Bernardino Base and Meridian
 **Gila and Salt River Base and Meridian
 ***Mount Diablo Base and Meridian

TABLE D-1
 SAMPLING STATION DATA AND INDEX
 SOUTHERN CALIFORNIA
 (continued)

Station	Station number	Location*	Beginning of record	Frequency of sampling	Analyses on page
Piru Creek Below Santa Felicia Dam	Z-2-3240.00	04N/18W-20	June 1957	Monthly	23, 44
Piru Lake Near Piru	Z-2-3375.00	05N/18W-10P	May 1955	Annually	23
Rio Hondo At Whittier Narrows	Z-7-5100.00	02S/11W-6B	April 1951	Monthly	26, 27, 47, 48
Above Spreading Grounds	Z-6-9780.00	02S/12W-12B	May 1963	Monthly	25, 26, 46, 47
Salinas River At Paso Robles	D-3-1450.00	26S/12E-28***	May 1951	Three/year	19
Salton Sea At Salton Sea State Park	W-5-1600.70	08S/10E-2L	March 1955	Bimonthly	31, 50
San Diego River At Old Mission Dam	X-5-1230.30	15S/2W-25F	April 1951	Bimonthly	39, 56
San Gabriel River At Azusa Powerhouse	Z-7-1927.10	01N/10W-22J	March 1957	Monthly	26, 47
At Whittier Narrows	Z-7-1100.90	02S/11W-5K	April 1951	Monthly	26, 47
San Timoteo Creek At Waterman Avenue Near San Bernardino	Y-7-1145.00	01S/4W-23N	March 1964	Monthly	38, 55
Santa Ana River Number One Tailrace Near Mentone	Y-5-1978.00	01S/2W-4P	April 1951	Monthly	36, 54
At Colton	Y-5-1080.00	01S/4W-28C	March 1964	Monthly	35, 36, 53, 54
Near Arlington	Y-6-1400.00	02S/6W-25L	January 1951	Monthly	37, 38, 55
Near Norco	Y-6-1225.00	03S/7W-01A	April 1951	Monthly	37, 54, 55
Below Prado Dam	Y-1-1550.00	03S7W-29E	April 1951	Monthly	34, 35, 52
Santa Clara River At Los Angeles-Ventura County Line	Z-3-1135.00	04N/17W-30K	April 1951	Monthly	23, 24, 44
Near Santa Paula	Z-2-1360.10	03N/21W-12P	April 1951	Monthly	22, 43
Santa Margarita Creek Below Highway At Santa Margarita	D-3-1590.00	29S/13E-21***	January 1961	Annually	19,
Santa Margarita River Near Fallbrook	X-2-1350.00	09S/4W-14H	February 1951	Bimonthly	38, 56
Santa Paula Creek Near Santa Paula	Z-2-1300.00	04N/21W-27N	June 1957	Monthly	21, 22, 42, 43
Santa Rosa Creek At Cambria	D-5-2010.00	27S/08E ***	October 1952	Annually	19
Santa Ynez River Near Solvang	D-8-1440.00	06N/31W-21R	April 1951	Monthly	20, 41
Sespe Creek Near Fillmore	Z-2-2150.00	04N/20W-12B	June 1957	Monthly	22, 23, 43, 44
Spring Valley Creek Near La Pressa	X-6-2020.05	17S/01W-17	March 1958	Bimonthly	39, 56
Toro Creek Above Highway 1 Near Cayucos	D-5-6005.00	29S/10E06***	November 1952	Annually	19
Ventura River Near Ventura	Z-1-1100.00	03N/23W-08F	May 1951	Monthly	20, 21, 42
Warm Creek Near Colton	Y-4-1100.00	01S/04W-21L	April 1951	Monthly	35, 53
Whitewater River Near Whitewater	W-3-1450.00	03S/3E-2B	February 1951	Bimonthly	31, 50
Near Mecca	W-3-1070.00	07S/9E-30R	July 1957	Bimonthly	31, 50

TABLE D-2 MINERAL ANALYSES OF SURFACE WATER

An explanation of column headings follows:

- GH - The instantaneous gage height in feet above an established datum.
- Q - The instantaneous discharge in cubic feet per second (cfs). "E" indicates the value has been estimated.
- DO - The dissolved oxygen content in milligrams per liter.
- SAT - The percent saturation.
- LAB EC - The electrical conductance in micromhos at 25° Celsius.
- FIELD EC - The electrical conductance in micromhos at temperature when sampled.
- LAB & FIELD PH - Measure of acidity or alkalinity of water.
- TDS - Gravimetric determination of total dissolved solids at 180° Celsius.
- SUM - Total dissolved solids determined by addition of analyzed constituents.
≠ - Difference between total anions and total cations of over five percent.
- TH - Total hardness.
- NCH - Non-carbonate hardness.
- TIME - Pacific Standard Time on a 24-hour clock.
- TEMP - Water temperature in degrees Fahrenheit at the time of field sampling.

The MINERAL CONSTITUENTS are as follows:

- | | | | |
|------------------|---------------|-----------------|-------------|
| B | - Boron | K | - Potassium |
| CA | - Calcium | MG | - Magnesium |
| CL | - Chloride | NA | - Sodium |
| CO ₃ | - Carbonate | NO ₃ | - Nitrate |
| F | - Fluoride | SI ₂ | - Silica |
| HCO ₃ | - Bicarbonate | SO ₄ | - Sulfate |

The LAB and SAMPLER agency codes are as follows:

- 1101 - Los Angeles County Flood Control District
- 1200 - City of Los Angeles Department of Water and Power
- 4412 - The Metropolitan Water District of Southern California
- 5050 - Department of Water Resources
- 5056 - Federal Water Pollution Control Administration
- 5064 - Department of Water Resources
- 5091 - California Department of Public Health
- 5100 - San Bernardino County Flood Control District
- 5117 - San Luis Obispo County Flood Control and Water Conservation District
- 5239 - Long Beach Health Department
- 5411 - United Water Conservation District
- 5867 - Fruit Growers Laboratory

TABLE D-2
MINERAL ANALYSES OF SURFACE WATER

DATE TIME	LAB SAMPLER	GH O	DO SAT	TEMP	LABORATORY FIELD	PH	EC	MINERAL CONSTITUENTS IN				MILLIGRAMS PER LITER			MILLIGRAMS PER LITER			TDS SUM	TH NCH	
								CA	MG	NA	K	PERCENT CO3	PER LITER REACTANCE HCO3	PER LITER VALUE SO4	PER LITER VALUE CL	PER LITER VALUE NO3	F			8
STATION NUMBER D31450.00 SALINAS RIVER AT PASO ROBLES																				
3/13/68	5050	--	--	--	7.7	842	84	29	55	3	0	286	137	46	2.5	0.4	0.21	--	553	329
1200	5117	500 E	--	--	--	--	4.19	2.38	2.39	0.08	0.00	4.69	2.85	1.30	0.04	--	--	--	498	94
							46	26	26	1	0	53	32	15	0					
STATION NUMBER D31475.00 PASO ROBLES CREEK AT TEMPLETON																				
3/13/68	5050	--	--	--	8.8	471	57	15	14	3	11	162	61	14	4.5	0.2	0.00	--	285	204
1130	5117	150 E	--	--	--	--	2.84	1.23	0.61	0.08	0.37	2.65	1.27	0.39	0.07	--	--	--	260	53
							60	26	13	2	8	56	27	8	1					
STATION NUMBER D31590.00 SANTA MARGARITA CREEK BELOW HIGHWAY AT SANTA MARGARITA																				
2/21/68	5050	--	--	--	8.0	477	32	32	20	1	0	234	41	12	0.5	0.2	0.04	--	284	212
1500	5117	12 E	--	--	--	--	1.60	2.63	0.87	0.02	0.00	3.83	0.85	0.34	0.01	--	--	--	254	20
							31	51	17	0	0	76	17	7	0					
STATION NUMBER D33520.00 NACIMIENTO RIVER NEAR SAN MIGUEL																				
3/13/68	5050	--	--	--	7.6	315	30	15	10	1	0	134	37	6	1.0	0.2	0.10	--	202	137
1430	5117	1000 E	--	--	--	--	1.50	1.23	0.43	0.02	0.00	2.20	0.77	0.17	0.02	--	--	--	167	27
							47	39	14	1	0	70	24	5	0					
5/07/68	5050	--	11.4	58	8.3	308	30	15	10	1	0	135	36	7	0.0	--	0.00	11	168	137
1210	5050	200 E	111	8.0	--	--	1.50	1.23	0.43	0.02	0.00	2.21	0.75	0.20	0.00	--	--	--	177	26
							47	39	14	1	0	70	24	6	0					
2/04/68	5050	--	8.7	60	8.0	347	32	16	8	2	0	150	34	8	0.5	--	0.80	--	154	146
0725	5050	250 E	86	7.4	--	--	1.60	1.31	0.35	0.05	0.00	2.46	0.71	0.22	0.01	--	--	--	175	23
							48	40	10	1	0	72	21	7	0					
STATION NUMBER D51100.00 ARROYO DE LA CRUZ NEAR SAN SIMEON																				
3/28/68	5050	--	--	--	8.9	459	38	29	13	1	16	202	29	12	0.0	0.1	0.10	--	220	214
--	5117	100 E	--	--	--	--	1.90	2.38	0.56	0.02	0.53	3.31	0.60	0.34	0.00	--	--	--	238	22
							39	49	12	0	11	69	13	7	0					
STATION NUMBER D52010.00 SANTA ROSA CREEK AT CAMBRIA																				
3/28/68	5050	--	--	--	9.0	785	40	60	26	2	32	324	111	28	1.0	0.2	0.10	--	456	347
--	5117	--	--	--	--	--	1.99	4.93	1.13	0.05	1.07	5.31	2.31	0.79	0.02	--	--	--	460*	28
							25	61	14	1	11	56	24	8	0					
STATION NUMBER D55000.00 OLD CREEK ABOVE WHALE ROCK DAM NEAR CAYUCOS																				
2/19/68	5050	--	--	--	8.6	770	56	49	32	1	13	344	64	31	0.1	0.2	0.10	--	433	341
1600	5117	3 E	--	--	--	--	2.79	4.03	1.39	0.02	0.43	5.64	1.33	0.87	0.00	--	--	--	416	38
							34	49	17	0	5	68	16	11	0					
STATION NUMBER D56005.00 TORO CREEK ABOVE HIGHWAY 1 NEAR CAYUCOS																				
2/19/68	5050	--	--	--	8.7	694	40	49	27	1	14	286	64	26	0.2	0.2	0.10	--	388	301
1500	5117	5 E	--	--	--	--	1.99	4.03	1.17	0.02	0.47	4.69	1.33	0.73	0.00	--	--	--	363	44
							28	56	16	0	6	65	18	10	0					
STATION NUMBER D63050.00 CUYAMA RIVER NEAR GAREY																				
1/04/67	5050	--	10.0	64	8.0	803	87	33	53	4	0	229	226	33	6.5	0.6	0.22	--	600	353
0900	5050	80.0	104	7.3	--	--	4.34	2.71	2.30	0.10	0.00	3.75	4.70	0.93	0.10	--	--	--	556	165
							46	29	24	1	0	39	50	10	1					
1/07/67	5050	4.36	10.1	64	8.1	824	81	31	48	5	0	205	220	33	2.5	0.6	0.22	--	600	330
1340	5050	140	105	7.5	--	--	4.04	2.55	2.09	0.13	0.00	3.36	4.58	0.93	0.04	--	--	--	523	162
							46	29	24	1	0	38	51	10	0					
2/11/67	5050	--	10.5	57	7.8	886	89	34	50	5	0	222	239	34	1.5	0.6	0.20	--	600	362
1120	5050	100	101	8.2	--	--	4.44	2.80	2.17	0.13	0.00	3.64	4.97	0.96	0.02	--	--	--	563	180
							46	29	23	1	0	38	52	10	0					
1/11/68	5050	--	11.8	48	8.0	914	95	36	50	5	0	234	241	34	2.5	0.6	0.19	--	629	385
1945	5050	100	101	7.6	--	--	4.74	2.96	2.17	0.13	0.00	3.83	5.02	0.96	0.04	--	--	--	580	193
							47	30	22	1	0	39	51	10	0					
3/15/68	5050	--	15.7	60	8.0	1365	128	62	88	4	0	278	438	59	0.5	0.7	0.12	--	1007	575
1000	5050	--	156	7.7	--	--	6.39	5.10	3.83	0.10	0.00	4.56	9.12	1.66	0.01	--	--	--	917	347
							41	33	25	1	0	30	59	11	0					
4/05/68	5050	--	8.6	70	8.2	1517	143	68	99	5	0	295	490	64	0.6	0.7	0.27	--	1104	637
1130	5050	20.0	96	7.7	--	--	7.13	5.59	4.31	0.13	0.00	4.83	10.20	1.80	0.01	--	--	--	1016	395
							42	33	25	1	0	29	60	11	0					
5/03/68	5050	--	8.9	58	8.5	1680	149	74	122	6	10	290	571	77	0.4	0.6	0.30	--	1230	677
0750	5050	5.0	87	7.5	--	--	7.43	6.08	5.31	0.15	0.33	4.75	11.89	2.17	0.01	--	--	--	1153	422
							39	32	28	1	2	25	62	11	0					

TABLE D-2
MINERAL ANALYSES OF SURFACE WATER

DATE TIME	LAB SAMPLER	GH O	DO SAT	TEMP	LABORATORY FIELD		MINERAL CONSTITUENTS IN				MILLIGRAMS PER MILLIEQUIVALENTS PER PERCENT REACTANCE			LITER LITER VALUE		MILLIGRAMS PER LITER			LITER TDS SUM	TI NCI	
					PH	EC	CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SI02			
STATION NUMBER D81440.00 SANTA YNEZ RIVER NEAR SOLVANG																					
12/11/67	5050	0.59	12.5	68	8.1	1099	98	64	55	3	0	376	271	32	0.5	0.5	0.31	--	774	50	
1300	5050	9.3	136		8.0	--	4.89	5.26	2.39	0.08	0.00	6.16	5.64	0.90	0.01				710	20	
							39	42	19	1	0	48	44	7	0						
01/11/68	5050	0.64	10.4	54	8.1	1085	101	62	53	3	0	376	254	31	0.6	0.5	0.31	--	747	50	
2040	5050	1.9	96		7.5	--	5.04	5.10	2.30	0.08	0.00	6.16	5.29	0.87	0.01				691	19	
							40	41	18	1	0	50	43	7	0						
02/14/68	5050	0.87	9.9	56	8.2	986	94	55	48	2	0	342	239	24	0.5	0.5	0.31	--	682	46	
0820	5050	25.0	94		7.5	--	4.69	4.52	2.09	0.05	0.00	5.60	4.97	0.68	0.01				632	18	
							41	40	18	0	0	50	44	6	0						
03/15/68	5050	0.70	12.5	59	8.2	1029	95	58	50	2	0	356	237	31	0.0	0.5	0.29	--	704	47	
0950	5050	15.0	123		7.5	--	4.74	4.77	2.17	0.05	0.00	5.83	4.93	0.87	0.00				649	18	
							40	41	18	0	0	50	42	7	0						
04/05/68	5050	0.78	9.2	71	8.3	1032	81	58	51	2	0	308	245	30	0.0	0.5	0.29	--	696	44	
1220	5050	19.0	104		7.7	--	4.04	4.77	2.22	0.05	0.00	5.05	5.10	0.85	0.00				620	18	
							36	43	20	0	0	46	46	8	0						
05/03/68	5050	2.47	10.3	64	8.5	1060	86	58	58	2	13	303	255	32	0.9	0.3	0.30	--	707	45	
1110	5050	2.0	107		7.5	--	4.29	4.77	2.52	0.05	0.43	4.97	5.31	0.90	0.01				655	18	
							37	41	22	0	4	43	46	8	0						
STATION NUMBER D81565.00 LAKE CACHUMA NEAR SANTA YNEZ																					
10/04/67	5050	45.41	9.2	72	8.0	744	72	40	42	3	0	210	237	15	1.5	0.5	0.44	--	555	34	
1020	5050	--	104		7.8	--	3.59	3.29	1.83	0.08	0.00	3.44	4.93	0.42	0.02				515	17	
							41	37	21	1	0	39	56	5	0						
11/07/67	5050	44.38	9.9	66	8.3	799	74	39	40	3	0	220	232	15	0.0	0.5	0.39	--	550	34	
1200	5050	--	106		7.7	--	3.69	3.21	1.74	0.08	0.00	3.60	4.83	0.42	0.00				513	16	
							42	37	20	1	0	41	54	5	0						
12/11/67	5050	44.13	9.5	63	7.9	787	75	38	38	3	0	225	220	13	0.0	0.5	0.36	--	545	34	
1400	5050	--	98		8.2	--	3.74	3.12	1.65	0.08	0.00	3.69	4.58	0.37	0.00				499	15	
							43	36	19	1	0	43	53	4	0						
01/11/68	5050	43.95	11.7	54	7.9	795	77	39	38	3	0	226	219	12	1.2	0.5	0.34	--	545	35	
2105	5050	--	108		7.5	--	3.84	3.21	1.65	0.08	0.00	3.70	4.56	0.34	0.02				502	16	
							44	36	19	1	0	43	53	4	0						
02/14/68	5050	43.73	10.6	54	8.1	797	76	39	38	3	0	225	220	13	1.0	0.5	0.33	--	546	35	
0900	5050	--	98		7.7	--	3.79	3.21	1.65	0.08	0.00	3.69	4.58	0.37	0.02				502	16	
							43	37	19	1	0	43	53	4	0						
03/15/68	5050	44.40	14.7	56	8.2	799	78	38	38	3	0	225	223	15	0.5	0.5	0.32	--	541	35	
0910	5050	--	140		7.7	--	3.89	3.12	1.65	0.08	0.00	3.69	4.64	0.42	0.01				507	16	
							44	36	19	1	0	42	53	5	0						
04/04/68	5050	--	6.8	55	8.2	--	83	24	46	--	0	208	210	16	0.6	0.5	0.50	10	550	30	
--	5050	--	64		7.4	--	4.14	1.97	2	--	0.00	3.41	4.37	0.45	0.01				493	15	
							51	24	25		0	41	53	5	0						
04/05/68	5050	44.47	9.6	61	8.2	804	79	38	38	3	0	223	223	14	0.8	0.5	0.34	--	531	30	
1245	5050	--	97		7.5	--	3.94	3.12	1.65	0.08	0.00	3.65	4.64	0.39	0.01				507	15	
							45	35	19	1	0	42	53	4	0						
05/03/68	5050	43.51	10.6	64	8.5	844	78	40	44	3	6	214	230	17	0.8	0.3	0.30	--	546	30	
1130	5050	--	110		7.8	--	3.89	3.29	1.91	0.08	0.20	3.51	4.79	0.48	0.01				525	15	
							42	36	21	1	2	39	53	5	0						
06/11/68	5050	--	10.6	72	8.0	787	72	40	40	3	0	210	228	13	0.0	0.5	0.33	--	517	30	
1240	5050	--	120		7.9	--	3.59	3.29	1.74	0.08	0.00	3.44	4.75	0.37	0.00				501	15	
							41	38	20	1	0	40	55	4	0						
07/22/68	5050	38.86	10.5	71	8.3	777	76	40	40	3	0	216	234	14	0.0	0.6	0.38	--	605	30	
0830	5050	--	118		8.4	--	3.79	3.29	1.74	0.08	0.00	3.54	4.87	0.39	0.00				515	15	
							43	37	19	1	0	40	55	4	0						
STATION NUMBER Z11100.00 VENTURA RIVER NEAR VENTURA																					
10/04/67	5050	8.16	10.7	68	7.9	1055	130	37	68	2	0	290	294	52	12.0	0.6	0.60	--	800	40	
1130	5050	4.0	117		--	--	6.49	3.04	2.96	0.05	0.00	4.75	6.12	1.47	0.19				739	20	
							52	24	24	0	0	38	49	12	1						
11/06/67	5050	8.14	--	62	8.0	1101	127	36	64	2	0	295	277	48	11.3	0.6	0.53	--	778	40	
1330	5050	5.6	--		--	--	6.34	2.96	2.78	0.05	0.00	4.83	5.77	1.35	0.18				712	20	
							52	24	23	0	0	40	47	11	1						
12/12/67	5050	8.33	11.0	55	7.7	1060	123	36	58	2	0	289	266	44	9.3	0.6	0.44	--	727	40	
0845	5050	7.1	103		7.9	--	6.14	2.96	2.52	0.05	0.00	4.74	5.54	1.24	0.15				682	20	
							53	25	22	0	0	41	47	11	1						
01/11/68	5050	8.14	11.3	58	8.0	1089	124	36	61	3	0	273	274	51	11.0	0.6	0.48	--	754	40	
1615	5050	4.0	110		--	--	6.19	2.96	2.65	0.08	0.00	4.47	5.70	1.44	0.18				696	20	
							52	25	22	1	0	38	48	12	1						
02/14/68	5050	8.26	11.1	58	8.1	1062	117	35	58	2	0	259	263	48	12.0	0.6	0.41	--	794	40	
1020	5050	4.4	108		--	--	5.84	2.88	2.52	0.05	0.00	4.24	5.47	1.35	0.19				664	20	
							52	25	22	0	0	38	49	12	2						

TABLE D-2
MINERAL ANALYSES OF SURFACE WATER

DATE TIME	LAB SAMPLER	GH O	DO SAT	TEMP	LABORATORY FIELD	MINERAL CONSTITUENTS IN				MILLIGRAMS PER LITER			MILLIGRAMS PER LITER			LITER TDS SUM	LITER TH NCH			
						PH	EC	CA	MG	NA	K	PERCENT CO3	PER LITER REACTANCE HC03	PER LITER CL	PER LITER NO3			F	B	SI02
STATION NUMBER Z11100.00 VENTURA RIVER NEAR VENTURA																				
3/15/68	5050	8.63	10.0	61	8.0	1127	133	38	61	2	0	299	280	52	12.0	0.6	0.42	--	781	488
1615	5050	26.0	101	--	--	--	6.64	3.12	2.65	0.05	0.00	4.90	5.83	1.47	0.19				726	243
							53	25	21	0	0	39	47	12	2					
4/05/68	5050	8.45	9.7	66	7.8	1088	125	36	59	2	0	270	275	48	10.1	0.6	0.47	--	739	460
140A	5050	16.0	104	--	--	--	6.24	2.96	2.57	0.05	0.00	4.42	5.72	1.35	0.16				689	239
							53	25	22	0	0	38	49	12	1					
5/03/68	5050	8.35	10.8	63	8.5	1160	132	35	68	2	11	284	285	52	10.0	0.5	0.50	--	787	474
124A	5050	10.0	111	--	--	--	6.59	2.88	2.96	0.05	0.37	4.65	5.93	1.47	0.16				736	222
							53	23	24	0	3	37	47	12	1					
6/11/68	5050	8.12	7.9	69	7.7	1153	132	40	64	3	0	311	288	52	7.4	0.7	0.51	--	818	494
133A	5050	7.8	87	--	--	--	6.59	3.29	2.78	0.08	0.00	5.10	6.00	1.47	0.12				741	239
							52	26	22	1	0	40	47	12	1					
7/22/68	5050	7.97	9.9	72	7.8	1074	131	34	65	3	0	293	279	49	1.5	0.7	0.48	--	809	467
113A	5050	0.6	112	--	--	--	6.54	2.80	2.83	0.08	0.00	4.80	5.81	1.38	0.02				708	227
							53	23	23	1	0	40	48	11	0					
STATION NUMBER Z15500.00 MATILIIJA CREEK ABOVE DAM																				
0/04/67	5050	--	9.1	70	7.7	879	103	34	54	2	0	200	298	30	0.0	0.8	1.10	--	700	397
1205	5050	6.0	101	--	--	--	5.14	2.80	2.35	0.05	0.00	3.28	6.20	0.85	0.00				622	233
							50	27	23	0	0	32	60	8	0					
1/06/67	5050	1.54	9.4	68	8.2	983	112	32	59	3	0	242	278	37	0.0	1.0	1.18	--	695	411
1255	5050	6.8	102	--	--	--	5.59	2.63	2.57	0.08	0.00	3.97	5.79	1.04	0.00				643	213
							51	24	24	1	0	37	54	10	0					
2/12/67	5050	1.40	10.5	53	8.0	998	116	35	50	2	0	237	299	27	0.0	0.8	0.75	--	706	434
0845	5050	10.0	96	--	--	--	5.79	2.88	2.17	0.05	0.00	3.88	6.22	0.76	0.00				648	239
							53	26	20	0	0	36	57	7	0					
1/11/68	5050	1.42	10.7	55	8.2	965	119	33	49	2	0	249	278	28	0.0	0.8	0.82	--	679	433
1645	5050	11.0	100	--	--	--	5.94	2.71	2.13	0.05	0.00	4.08	5.79	0.79	0.00				633	229
							55	25	20	0	0	38	54	7	0					
2/14/68	5050	1.41	11.4	57	7.8	950	112	32	49	2	0	230	276	28	0.0	0.8	0.82	--	688	411
1100	5050	10.0	110	--	--	--	5.59	2.63	2.13	0.05	0.00	3.77	5.75	0.79	0.00				614	223
							54	25	20	0	0	37	56	8	0					
4/05/68	5050	1.47	9.5	68	8.1	927	102	34	45	2	0	207	277	22	0.0	0.8	0.72	--	660	395
1430	5050	14.0	104	--	--	--	5.09	2.80	1.96	0.05	0.00	3.39	5.77	0.62	0.00				586	225
							51	28	20	0	0	35	59	6	0					
5/03/68	5050	1.35	9.8	67	8.2	976	103	29	47	3	0	122	281	34	6.0	0.7	1.10	--	672	376
132A	5050	8.2	106	--	--	--	5.14	2.38	2.04	0.08	0.00	2.00	5.85	0.96	0.10				565#	276
							53	25	21	1	0	22	66	11	1					
6/11/68	5050	--	9.1	78	8.0	978	106	32	59	3	0	220	270	42	0.0	1.0	1.11	--	652	396
1420	5050	3.8	110	--	--	--	5.29	2.63	2.57	0.08	0.00	3.60	5.62	1.18	0.00				623	216
							50	25	24	1	0	35	54	11	0					
7/23/68	5050	1.12	12.2	80	8.2	1010	105	30	72	3	0	214	260	68	0.0	1.4	2.10	--	744	386
1300	5050	7.5	150	--	--	--	5.24	2.47	3.13	0.08	0.00	3.51	5.41	1.92	0.00				647	210
							49	23	29	1	0	32	50	18	0					
STATION NUMBER Z21300.00 SANTA PAULA CREEK NEAR SANTA PAULA																				
1/04/67	5050	1.52	11.9	72	7.8	756	75	26	60	2	0	181	225	32	1.0	0.5	0.30	--	560	294
135A	5050	8.0	135	--	--	--	3.74	2.14	2.61	0.05	0.00	2.97	4.68	0.90	0.02				511	146
							44	25	30	1	0	35	55	10	0					
1/06/67	5050	0.92	13.0	62	8.1	841	83	27	59	2	0	207	228	33	0.0	0.5	0.28	--	581	318
1210	5050	6.0	132	--	--	--	4.14	2.22	2.57	0.05	0.00	3.39	4.75	0.93	0.00				535	149
							46	25	29	1	0	37	52	10	0					
2/12/67	5050	1.72	12.2	53	8.1	867	98	27	54	2	0	249	218	29	1.4	0.5	0.23	--	583	356
0945	5050	10.0	112	--	--	--	4.89	2.22	2.35	0.05	0.00	4.08	4.54	0.82	0.02				553	152
							51	23	25	0	0	43	48	9	0					
1/11/68	5050	1.65	12.1	58	8.0	832	87	26	54	2	0	215	213	29	0.9	0.5	0.25	--	559	324
1545	5050	15.0	118	--	--	--	4.34	2.14	2.35	0.05	0.00	3.52	4.43	0.82	0.01				519	148
							49	24	26	1	0	40	50	9	0					
2/13/68	5050	1.72	12.3	56	8.2	814	87	26	54	2	0	228	200	29	1.0	0.5	0.23	--	559	324
131A	5050	1.5	117	--	--	--	4.34	2.14	2.35	0.05	0.00	3.74	4.16	0.82	0.02				512	137
							49	24	26	1	0	43	48	9	0					
3/14/68	5050	1.92	11.9	50	8.1	706	83	20	39	1	0	205	169	20	0.9	0.4	0.12	--	454	290
084A	5050	40.0	105	--	--	--	4.14	1.64	1.70	0.02	0.00	3.36	3.52	0.56	0.01				435	121
							55	22	23	0	0	45	47	8	0					
4/05/68	5050	1.73	9.6	68	8.3	720	74	22	44	1	0	176	188	22	0.0	0.5	0.19	--	485	275
1515	5050	17.0	105	--	--	--	3.69	1.81	1.91	0.02	0.00	2.88	3.91	0.62	0.00				439	131
							50	24	26	0	0	39	53	8	0					
5/03/68	5050	1.64	10.6	63	8.4	837	86	21	58	2	5	212	196	30	0.0	0.4	0.30	--	534	301
1355	5050	7.5	109	--	--	--	4.29	1.73	2.52	0.05	0.17	3.47	4.08	0.85	0.00				503	119
							50	20	29	1	2	40	48	10	0					

TABLE D-2
MINERAL ANALYSES OF SURFACE WATER

DATE TIME	LAB SAMPLER	GH O	DO SAT	TEMP	LABORATORY FIELD PH EC	MINERAL CONSTITUENTS IN				MILLIGRAMS PER MILLIEQUIVALENTS PER PERCENT			LITER PER LITER VALUE		MILLIGRAMS PER			LITER TDS		
						CA	MG	NA	K	CO3	HC03	SO4	CL	NO3	F	B	SI02	SUM	NC	
STATION NUMBER Z21300.00						SANTA PAULA CREEK NEAR SANTA PAULA														
06/11/68	5050	--	9.7	80	8.1	807	74	24	61	2	0	195	201	34	0.5	0.5	0.33	--	517	28
151A	5050	4.7	119		7.7	--	3.69	1.97	2.65	0.05	0.00	3.20	4.18	0.96	0.01				494	12
							44	24	32	1	0	38	50	11	0					
07/22/68	5050	1.56	13.8	83	8.4	886	64	27	89	2	5	168	235	52	1.3	0.6	0.46	--	620	25
1415	5050	5.2	175		8.4	--	3.19	2.22	3.87	0.05	0.17	2.75	4.89	1.47	0.02				559	12
							34	24	41	0	2	30	53	16	0					
09/16/68	5867	1.55	--	--	8.0	1133	92	36	93	--	0	261	285	59	0.0	0.4	0.50	--	826	31
1100	5411	3.0	--	--	--	--	4.59	2.96	4.04		0.00	4.28	5.93	1.66	0.00				695	10
							40	25	35		0	36	50	14	0					
STATION NUMBER Z21360.10						SANTA CLARA RIVER NEAR SANTA PAULA														
10/04/67	5050	--	8.3	74	7.7	1464	166	57	112	5	0	276	562	53	13.0	1.1	0.92	--	1200	61
1315	5050	40.0	96		7.7	--	8.28	4.69	4.87	0.13	0.00	4.52	11.70	1.49	0.21				1106	41
							46	26	27	1	0	25	65	8	1					
11/06/67	5050	--	7.3	66	7.6	1642	161	64	125	5	0	256	608	58	9.0	0.9	0.92	--	1284	61
1150	5050	20.0	78		7.6	--	8.03	5.26	5.44	0.13	0.00	4.19	12.66	1.63	0.14				1158	41
							43	28	29	1	0	22	68	9	1					
12/12/67	5050	--	10.6	59	7.9	1597	167	60	114	5	0	301	568	55	12.5	1.2	0.88	--	1222	61
1115	5050	35.0	104		8.0	--	8.33	4.93	4.96	0.13	0.00	4.93	11.82	1.55	0.20				1132	41
							45	27	27	1	0	27	64	8	1					
01/11/68	5050	--	10.1	62	8.0	1246	123	45	92	4	0	239	407	42	7.5	0.8	0.64	--	923	41
1530	5050	50.0	103		7.7	--	6.14	3.70	4.00	0.10	0.00	3.92	8.47	1.18	0.12				840	21
							44	26	29	1	0	29	62	9	1					
03/14/68	5050	--	10.2	53	8.1	1384	147	52	96	4	0	261	480	43	10.8	0.8	0.70	--	1048	51
0815	5050	70.0	93		7.3	--	7.33	4.28	4.17	0.10	0.00	4.28	9.99	1.21	0.17				963	31
							46	27	26	1	0	27	64	8	1					
04/05/68	5050	--	9.1	70	8.1	1529	147	57	108	4	0	231	541	51	10.5	1.0	0.84	--	1166	61
1535	5050	70.0	101		7.5	--	7.33	4.69	4.70	0.10	0.00	3.79	11.26	1.44	0.17				1034	41
							44	28	28	1	0	23	68	9	1					
05/03/68	5050	--	9.4	68	8.2	1700	162	53	107	6	0	170	612	58	13.0	0.8	0.90	--	1280	61
1410	5050	40.0	102		7.5	--	8.08	4.36	4.65	0.15	0.00	2.79	12.74	1.63	0.21				1097	41
							47	25	27	1	0	16	73	9	1					
06/11/68	5050	--	9.1	78	8.0	1832	174	75	146	6	0	270	709	69	12.0	1.0	0.90	--	1470	71
1530	5050	30.0	110		7.5	--	8.68	6.17	6.35	0.15	0.00	4.42	14.76	1.94	0.19				1326	51
							41	29	30	1	0	21	69	9	1					
07/22/68	5050	--	16.1	77	8.2	1750	178	72	142	6	0	281	677	64	11.5	1.0	0.92	--	1471	71
1445	5050	20.0	192		8.2	--	8.88	5.92	6.18	0.15	0.00	4.60	14.09	1.80	0.18				1291	51
							42	28	29	1	0	22	68	9	1					
09/16/68	5867	--	--	--	8.0	1802	166	59	150	--	0	309	663	66	15.0	0.8	1.00	--	1428	61
1145	5411	35.0	--	--	--	--	8.28	4.85	6.52		0.00	5.06	13.80	1.86	0.24				1273#	41
							42	25	33		0	24	66	9	1					
STATION NUMBER Z22150.00						SESPE CREEK NEAR FILLMORE														
10/04/67	5050	--	8.7	73	7.7	883	83	29	80	3	0	144	288	56	0.5	1.3	1.50	--	660	31
134A	5050	10.0	100		7.9	--	4.14	2.38	3.48	0.08	0.00	2.36	6.00	1.58	0.01				614	21
							41	24	34	1	0	24	60	16	0					
11/06/67	5050	--	18.0	62	8.2	1018	98	27	82	3	0	193	279	62	0.0	1.4	0.80	--	698	31
1120	5050	5.0	183		7.5	--	4.89	2.22	3.57	0.08	0.00	3.16	5.81	1.75	0.00				649	11
							45	21	33	1	0	29	54	16	0					
12/12/67	5050	--	12.2	54	8.0	964	103	32	58	2	0	217	289	30	0.0	1.2	0.86	--	665	31
1150	5050	41.0	113		8.4	--	5.14	2.63	2.52	0.05	0.00	3.56	6.02	0.85	0.00				623	21
							50	25	24	0	0	34	58	8	0					
01/11/68	5050	--	11.9	53	7.9	989	108	32	61	3	0	217	295	32	0.0	1.3	0.94	--	700	41
1440	5050	35.0	109		7.5	--	5.39	2.63	2.65	0.08	0.00	3.56	6.14	0.90	0.00				640	21
							50	24	25	1	0	33	58	8	0					
02/13/68	5050	--	12.1	53	7.9	591	63	17	34	2	0	129	163	17	0.5	0.7	0.42	--	391	21
1205	5050	62.0	111		7.5	--	3.14	1.40	1.48	0.05	0.00	2.11	3.39	0.48	0.01				361	11
							52	23	24	1	0	35	57	8	0					
03/14/68	5050	--	11.3	49	8.1	854	106	27	42	2	0	204	260	17	0.0	0.8	0.46	--	584	31
0740	5050	104	98		7.7	--	5.29	2.22	1.83	0.05	0.00	3.34	5.41	0.48	0.00				556	21
							56	24	19	0	0	36	59	5	0					
04/05/68	5050	--	8.1	64	8.1	895	94	30	51	2	0	171	283	22	0.0	1.0	0.66	--	616	31
1605	5050	35.0	84		7.7	--	4.69	2.47	2.22	0.05	0.00	2.80	5.89	0.62	0.00				568	21
							50	26	23	0	0	30	63	7	0					
05/03/68	5050	--	8.5	69	8.3	895	79	28	68	3	0	140	276	36	0.5	1.2	1.20	--	576	31
1415	5050	10.0	94		7.7	--	3.94	2.30	2.96	0.08	0.00	2.29	5.75	1.01	0.01				562	11
							42	25	32	1	0	25	63	11	0					
06/11/68	5050	--	8.1	80	8.6	933	68	31	78	3	5	76	308	57	0.0	1.4	1.21	--	615	31
1600	5050	0.8	100		7.7	--	3.39	2.55	3.39	0.08	0.17	1.24	6.41	1.61	0.00				590	21
							36	27	36	1	2	13	68	17	0					

TABLE D-2
MINERAL ANALYSES OF SURFACE WATER

DATE TIME	LAB SAMPLER	GH Q	DO SAT	TEMP	LABORATORY FIELD	MINERAL CONSTITUENTS IN				MILLIGRAMS PER MILLIEQUIVALENTS PER PERCENT REACTANCE			LITER LITER VALUE		MILLIGRAMS PER LITER			TDS SUM	TM NCH	
						PH	EC	CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F			B
STATION NUMBER Z22150.00						SESPE CREEK NEAR FILLMORE														
7/22/68	5050	--	19.0	83	8.4	1191	119	35	95	4	7	110	445	55	0.0	1.4	1.07	--	914	441
144n	5050	0.2	241		8.4	--	5.94	2.88	4.13	0.10	0.23	1.80	9.26	1.55	0.00				817	339
							45	22	32	1	2	14	72	12	0					
9/16/68	5867	3.90	--	--	8.4	1460	134	44	110	--	6	92	554	69	0.0	1.2	1.20	--	1009	516
1330	5411	0.1	--	--	--	--	6.69	3.62	4.78	--	0.20	1.51	11.53	1.94	0.00				965	430
							44	24	32		1	10	76	13	0					
STATION NUMBER Z23240.00						PIRU CREEK BELOW SANTA FELICIA DAM														
10/04/67	5050	1.61	8.6	74	8.1	935	99	41	55	4	0	195	343	18	1.5	1.1	0.76	--	715	416
141n	5050	10.0	100		7.7	--	4.94	3.37	2.39	0.10	0.00	3.20	7.14	0.51	0.02				660	256
							46	31	22	1	0	29	66	5	0					
1/06/67	5050	1.55	10.5	64	8.1	1003	105	42	53	4	0	212	345	13	0.0	1.0	0.78	--	743	435
1045	5050	6.2	109		7.5	--	5.24	3.45	2.30	0.10	0.00	3.47	7.18	0.37	0.00				668	261
							47	31	21	1	0	31	65	3	0					
1/11/68	5050	1.09	10.6	62	8.1	990	101	42	57	4	0	188	354	14	0.5	1.0	0.78	--	724	425
141n	5050	0.2	108		7.7	--	5.04	3.45	2.48	0.10	0.00	3.08	7.37	0.39	0.01				667	271
							45	31	22	1	0	28	68	4	0					
2/13/68	5050	1.35	11.7	53	8.2	1027	108	43	58	4	0	210	357	14	0.9	1.0	0.72	--	749	447
113n	5050	2.5	107		7.5	--	5.39	3.54	2.52	0.10	0.00	3.44	7.43	0.39	0.01				690	274
							47	31	22	1	0	30	66	3	0					
3/14/68	5050	1.09	9.9	45	7.8	1046	113	43	57	4	0	217	303	15	1.1	0.9	0.80	--	754	459
0705	5050	0.2	82		7.3	--	5.64	3.54	2.48	0.10	0.00	3.56	6.31	0.42	0.02				645#	281
							48	30	21	1	0	34	61	4	0					
4/05/68	5050	2.10	10.3	52	8.0	1067	112	43	58	4	0	212	363	17	0.6	1.0	0.80	--	770	457
1645	5050	4.0	93		7.3	--	5.59	3.54	2.52	0.10	0.00	3.47	7.56	0.48	0.01				704	283
							48	30	21	1	0	30	66	4	0					
5/03/68	5050	2.09	11.3	55	8.0	1100	111	43	64	4	0	218	374	18	1.3	0.9	0.90	--	776	454
150n	5050	4.0	106		7.3	--	5.54	3.54	2.78	0.10	0.00	3.57	7.79	0.51	0.02				725	275
							46	30	23	1	0	30	65	4	0					
6/11/68	5050	2.11	10.5	57	7.8	1067	112	43	59	4	0	217	367	16	1.5	1.2	0.75	--	765	457
163n	5050	4.0	101		7.3	--	5.59	3.54	2.57	0.10	0.00	3.56	7.64	0.45	0.02				712	279
							47	30	22	1	0	30	65	4	0					
7/22/68	5050	2.13	13.0	59	8.1	1036	112	43	61	4	0	215	375	17	1.0	1.2	0.92	--	814	457
1615	5050	4.0	128		8.0	--	5.59	3.54	2.65	0.10	0.00	3.52	7.81	0.48	0.02				721	280
							47	30	22	1	0	30	66	4	0					
9/16/68	5867	1.56	--	--	7.8	1141	102	51	69	--	0	217	392	24	0.0	1.1	1.00	--	855	465
1330	5411	7.4	--	--	--	--	5.09	4.19	3.00	--	0.00	3.56	8.16	0.68	0.00				747	287
							41	34	24		0	29	66	5	0					
STATION NUMBER Z23375.00						PIRU LAKE NEAR PIRU														
9/16/68	5867	75.00	--	--	7.9	1138	108	47	71	--	0	198	413	25	0.0	0.9	1.10	--	862	463
1100	5411	--	--	--	--	--	5.39	3.86	3.09	--	0.00	3.24	8.60	0.70	0.00				764	301
							44	31	25		0	26	68	6	0					
STATION NUMBER Z31135.00						SANTA CLARA RIVER AT LOS ANGELES-VENTURA CO. LINE														
10/04/67	5050	--	8.2	80	7.8	1789	156	72	172	6	0	295	662	88	15.0	1.2	0.60	--	1410	686
150n	5050	6.0	101		7.9	--	7.78	5.92	7.48	0.15	0.00	4.83	13.78	2.48	0.24				1318	444
							36	28	35	1	0	23	65	12	1					
1/06/67	5050	--	9.4	68	7.9	2083	189	83	190	6	0	371	768	88	4.6	0.9	0.76	--	1676	813
102n	5050	2.0	102		7.5	--	9.43	6.82	8.26	0.15	0.00	6.08	15.99	2.48	0.07				1513	509
							38	28	33	1	0	25	65	10	0					
2/12/67	5050	--	9.6	65	8.0	1969	190	78	164	6	0	366	725	76	5.5	1.2	0.62	--	1574	795
1315	5050	15.0	101		8.2	--	9.48	6.41	7.13	0.15	0.00	6.00	15.09	2.14	0.09				1427	495
							41	28	31	1	0	26	65	9	0					
1/11/68	5050	--	9.0	61	8.0	1665	158	65	137	6	0	298	580	70	5.5	0.9	0.56	--	1283	662
135n	5050	12.0	91		7.7	--	7.88	5.34	5.96	0.15	0.00	4.88	12.07	1.97	0.09				1170	418
							41	28	31	1	0	26	63	10	0					
2/13/68	5050	--	11.1	59	8.0	1685	143	65	140	5	0	273	569	70	5.5	1.1	0.46	--	1264	625
110n	5050	30.0	109		7.7	--	7.13	5.34	6.09	0.13	0.00	4.47	11.85	1.97	0.09				1134	401
							38	29	33	1	0	24	64	11	0					
3/14/68	5050	--	10.2	49	8.2	1722	165	67	142	5	0	326	603	69	6.7	1.0	0.40	--	1357	688
063n	5050	10.0	89		7.5	--	8.23	5.51	6.18	0.13	0.00	5.34	12.55	1.94	0.11				1220	420
							41	27	31	1	0	27	63	10	0					
4/05/68	5050	--	9.4	69	8.0	1861	167	72	158	6	0	289	673	79	5.8	0.9	0.54	--	1423	713
170n	5050	10.0	104		7.7	--	8.33	5.92	6.87	0.15	0.00	4.74	14.01	2.23	0.09				1305	476
							39	28	32	1	0	22	66	11	0					
5/03/68	5050	--	7.1	78	8.3	2250	182	82	228	8	0	290	872	101	7.0	0.8	0.80	--	1750	792
152n	5050	2.0	85		7.7	--	9.08	6.74	9.92	0.20	0.00	4.75	18.15	2.85	0.11				1625	554
							35	26	38	1	0	18	70	11	0					
6/11/68	5050	--	8.1	78	7.9	2370	194	101	234	7	0	306	956	106	5.6	1.3	0.76	--	1895	900
165n	5050	2.0	98		7.6	--	9.68	8.31	10.18	0.18	0.00	5.01	19.90	2.99	0.09				1757	649
							34	29	36	1	0	18	71	11	0					

TABLE D-2
MINERAL ANALYSES OF SURFACE WATER

DATE TIME	LAB SAMPLER	GH Q	DO SAT	TEMP	LABORATORY FIELD PH EC	MINERAL CONSTITUENTS IN				MILLIGRAMS PER MILLIEQUIVALENTS PER PERCENT			LITER PER LITER VALUE		MILLIGRAMS PER LITER			TOS SUM	TH NCI	
						CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	5102			
STATION NUMBER Z31135.00						SANTA CLARA RIVER AT LOS ANGELES-VENTURA CO. LINE														
09/16/68	5867	3.83	--	--	7.9	3282	219	114	420	--	0	337	1358	171	0.0	0.9	1.30	--	2619	1010
144h	5411	0.6	--	--	--	10.93	9.37	18.27	--	0.00	5.52	28.27	4.82	0.00					2450	740
						28	24	47		0	14	73	12	0						
STATION NUMBER Z61100.00						LOS ANGELES RIVER AT PACIFIC COAST HIGHWAY														
10/04/67	5239	--	0.5	73	7.2	--	245	475	5350	--	0	216	1028	8116	1.2	--	--	--	16745	2560
1030	5239	--	6	--	--	12.22	39.06	232.72	--	0.00	3.54	21.40	228.87	0.02					15322	238
						4	14	82		0	1	8	90	0						
11/01/67	5239	--	1.2	70	7.4	--	325	680	6400	--	0	213	1351	12531	15.5	--	--	--	20653	3610
1100	5239	--	13	--	--	16.22	55.92	278.40	--	0.00	3.49	28.13	353.37	0.25					21408	343
						5	16	79		0	1	7	92	0						
12/06/67	5239	--	3.8	64	7.1	--	37	150	1500	--	0	163	407	2724	39.9	--	--	--	4936	710
1130	5239	--	40	--	--	1.85	12.33	65.25	--	0.00	2.67	8.47	76.82	0.64					4938	57
						2	15	82		0	3	10	87	1						
01/03/68	5239	--	4.0	57	7.4	--	138	240	1000	--	0	223	445	1904	14.2	--	--	--	3912	1330
1050	5239	--	38	--	--	6.89	19.74	43.50	--	0.00	3.65	9.26	53.69	0.23					3851	114
						10	28	62		0	5	14	80	0						
02/07/68	5239	--	2.2	63	7.3	--	166	240	1700	--	0	441	474	3469	13.0	--	--	--	6466	1400
1020	5239	--	23	--	--	8.28	19.74	73.95	--	0.00	7.23	9.87	97.82	0.21					6279	104
						8	19	72		0	6	9	85	0						
03/06/68	5239	--	0.2	84	7.4	--	530	460	--	--	0	546	66	16001	66.3	--	--	--	27949	3210
1045	5239	--	3	--	--	26.45	37.83	--	--	0.00	8.95	1.37	451.23	1.07					--	276
04/03/68	5239	--	5.1	66	7.2	--	79	70	500	--	0	135	172	1017	172.2	--	--	--	1742	480
1100	5239	--	55	--	--	3.94	5.76	21.75	--	0.00	2.21	3.58	28.68	2.78					2077	37
						12	18	69		0	6	10	77	7						
05/01/68	5239	--	3.1	68	7.7	--	304	600	4900	--	0	287	650	10501	32.0	--	--	--	16450	3220
1100	5239	--	34	--	--	15.17	49.34	213.15	--	0.00	4.70	13.53	296.13	0.52					17129	299
						5	18	77		0	1	4	94	0						
06/03/68	5239	--	2.5	70	8.0	--	89	40	280	--	0	203	311	331	13.0	--	--	--	1154	380
1015	5239	--	28	--	--	4.44	3.29	12.18	--	0.00	3.33	6.47	9.33	0.21					1164	22
						22	16	61		0	17	33	48	1						
07/03/68	5239	--	2.1	75	7.9	--	--	220	1600	--	0	206	39414	2778	15.0	--	--	--	4384	--
1215	5239	--	25	--	--	--	18.09	69.60	--	0.00	3.38	820.60	78.34	0.24					--	--
08/07/68	5239	--	2.3	75	7.3	--	206	313	3520	--	0	157	837	5816	14.0	--	--	--	11627	1800
0950	5239	--	27	--	--	10.28	25.74	153.12	--	0.00	2.57	17.43	164.01	0.22					10784	167
						5	14	81		0	1	9	89	0						
09/04/68	5239	--	1.8	72	7.6	--	190	220	3600	--	0	237	680	5815	15.0	--	--	--	969	1380
1015	5239	--	20	--	--	9.48	18.09	156.60	--	0.00	3.88	14.16	163.98	0.24					10637	118
						5	10	85		0	2	8	90	0						
09/19/68	5050	--	2.2	69	7.3	5602	114	102	1000	32	0	261	443	1570	1.2	0.8	1.60	--	3489	700
100h	5050	24.2	24	8.3	--	5.69	8.39	43.50	0.82	0.00	4.28	9.22	44.27	0.02					3393	49
						10	14	74	1	0	7	16	77	0						
STATION NUMBER Z61300.00						LOS ANGELES RIVER AT FIGUEROA STREET														
10/04/67	5091	--	14.0	72	8.2	--	94	26	152	--	0	217	221	118	18.0	--	--	--	827	340
1125	5091	--	159	--	--	4.69	2.14	6.61	--	0.00	3.56	4.60	3.33	0.29					736	16
						35	16	49		0	30	39	28	2						
11/01/67	5091	--	11.0	62	8.2	--	90	29	160	--	0	202	256	123	16.0	--	--	--	877	340
1030	5091	--	112	--	--	4.49	2.38	6.96	--	0.00	3.31	5.33	3.47	0.26					774	17
						32	17	50		0	27	43	28	2						
12/06/67	5091	--	9.1	56	8.2	--	82	23	94	--	0	173	172	77	36.0	--	--	--	660	290
1120	5091	--	86	--	--	4.09	1.89	4.09	--	0.00	2.83	3.58	2.17	0.58					570	19
						41	19	41		0	31	39	24	6						
01/03/68	5091	--	16.0	50	8.1	--	86	24	108	--	0	194	210	93	10.0	--	--	--	725	310
1130	5091	--	141	--	--	4.29	1.97	4.70	--	0.00	3.18	4.37	2.62	0.16					627	19
						39	18	43		0	31	42	25	2						
02/07/68	5091	--	13.0	58	8.0	--	98	26	124	--	0	192	244	104	18.0	--	--	--	814	390
1130	5091	--	127	--	--	4.89	2.14	5.39	--	0.00	3.15	5.08	2.93	0.29					709	19
						39	17	43		0	27	44	26	2						
03/06/68	5091	--	16.0	60	8.1	--	90	29	138	--	0	206	245	118	19.0	--	--	--	829	340
1115	5091	--	159	--	--	4.49	2.38	6.00	--	0.00	3.38	5.10	3.33	0.31					741	17
						35	18	47		0	28	42	27	2						
04/03/68	5091	--	9.4	70	7.6	--	78	15	82	--	0	137	168	75	12.0	--	--	--	575	290
1130	5091	--	105	--	--	3.89	1.23	3.57	--	0.00	2.24	3.50	2.11	0.19					498	14
						45	14	41		0	28	43	26	2						
05/01/68	5091	--	9.1	--	7.6	--	85	27	150	--	0	159	269	120	18.0	--	--	--	860	370
0905	5091	--	--	--	--	4.24	2.22	6.52	--	0.00	2.61	5.60	3.38	0.29					748	14
						33	17	50		0	22	47	28	2						
06/05/68	5091	--	11.0	65	8.2	--	84	29	137	--	0	172	242	115	22.0	--	--	--	835	370
1115	5091	--	116	--	--	4.19	2.38	5.96	--	0.00	2.82	5.04	3.24	0.35					714	14
						33	19	47		0	25	44	28	3						

TABLE D-2
MINERAL ANALYSES OF SURFACE WATER

DATE TIME	LAB SAMPLER	GH Q	DO SAT	TEMP	LABORATORY FIELD PH EC	MINERAL CONSTITUENTS IN				MILLIGRAMS PER MILLIEQUIVALENTS PER PERCENT REACTANCE			LITER PER LITER VALUE		MILLIGRAMS PER LITER			LITER TOS TH		
						CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SI02	SUM	NCH	
STATION NUMBER Z61300.00						LOS ANGELES RIVER AT FIGUEROA STREET														
07/03/68	5091	--	18.0	76	7.8	--	84	29	156	--	0	146	307	122	6.9	--	--	--	865	329
113n	5091	--	212	--	--	--	4.19	2.38	6.78	--	0.00	2.39	6.39	3.44	0.11	--	--	--	777#	209
							31	18	51		0	19	52	28	1					
08/15/68	5091	--	14.0	72	7.4	--	79	27	148	--	0	46	278	199	17.0	--	--	--	910	308
1140	5091	--	159	--	--	--	3.94	2.22	6.44	--	0.00	0.75	5.79	5.61	0.27	--	--	--	771	271
							31	18	51		0	6	47	45	2					
09/03/68	5091	--	16.0	68	7.7	--	82	31	160	--	0	177	292	139	14.0	--	--	--	930	332
1145	5091	--	174	--	--	--	4.09	2.55	6.96	--	0.00	2.90	6.08	3.92	0.22	--	--	--	805	187
							30	19	51		0	22	46	30	2					
09/19/68	5050	0.27	5.2	67	7.3	1226	80	28	144	7	0	194	280	120	19.2	1.0	0.65	--	815	315
080n	5050	7.7	56	--	7.7	--	3.99	2.30	6.26	0.18	0.00	3.18	5.83	3.38	0.31	--	--	--	776	156
							31	18	49	1	0	25	46	27	2					
STATION NUMBER Z61850.05						LOS ANGELES AQUEDUCT NEAR SAN FERNANDO														
10/17/67	1200	--	8.4	65	8.2	291	21	4	30	4	--	--	28	12	0.5	0.4	0.48	19	--	69
--	1200	495	89	--	8.0	--	1.05	0.33	1.30	0.10	--	--	0.58	0.34	0.01	--	--	--	120#	--
							38	12	47	4			63	36	1					
11/14/67	1200	--	9.6	60	8.3	322	22	5	31	4	--	--	28	13	0.4	0.5	0.40	19	--	75
--	1200	464	95	--	8.4	--	1.10	0.41	1.35	0.10	--	--	0.58	0.37	0.01	--	--	--	--	--
12/19/67	1200	--	11.2	49	8.5	335	24	6	31	4	--	--	33	14	0.2	0.4	0.39	18	--	85
--	1200	405	98	--	8.2	--	1.20	0.49	1.35	0.10	--	--	0.69	0.39	0.00	--	--	--	--	--
01/16/68	1200	--	12.0	42	8.2	339	24	6	34	4	--	--	28	14	0.4	0.5	0.40	19	--	85
--	1200	409	95	--	8.0	--	1.20	0.49	1.48	0.10	--	--	0.58	0.39	0.01	--	--	--	131#	--
							37	15	45	3			59	40	1					
02/20/68	1200	--	11.6	46	8.4	348	25	6	36	4	--	--	30	16	0.5	0.7	0.49	21	--	87
--	1200	439	97	--	8.5	--	1.25	0.49	1.56	0.10	--	--	0.62	0.45	0.01	--	--	--	--	--
03/19/68	1200	--	10.8	51	8.4	368	25	6	43	4	--	--	36	16	0.5	0.6	0.79	23	--	87
--	1200	442	96	--	8.6	--	1.25	0.49	1.87	0.10	--	--	0.75	0.45	0.01	--	--	--	--	--
04/22/68	1200	--	9.8	57	8.2	372	25	7	41	4	--	--	30	17	0.3	0.6	0.52	23	--	91
--	1200	485	94	--	8.4	--	1.25	0.57	1.78	0.10	--	--	0.62	0.48	0.00	--	--	--	149#	--
							34	15	48	3			56	43	0					
05/21/68	1200	--	10.1	--	8.1	363	25	6	44	4	--	--	30	17	0.4	0.6	0.45	23	--	87
--	1200	495	--	--	--	--	1.25	0.49	1.91	0.10	--	--	0.62	0.48	0.01	--	--	--	151#	--
							33	13	51	3			56	43	1					
06/18/68	1200	--	8.4	67	8.2	345	26	5	36	4	--	--	26	15	0.5	0.6	0.51	22	--	85
--	1200	497	91	--	8.4	--	1.30	0.41	1.56	0.10	--	--	0.54	0.42	0.01	--	--	--	136#	--
							38	12	46	3			56	43	1					
07/16/68	1200	--	8.0	72	8.1	329	24	5	33	4	--	--	26	14	0.4	0.6	0.40	22	--	80
--	1200	492	91	--	8.2	--	1.20	0.41	1.43	0.10	--	--	0.54	0.39	0.01	--	--	--	130#	--
							38	13	46	3			57	42	1					
08/20/68	1200	--	8.4	73	8.4	320	24	5	31	4	--	--	24	13	0.5	0.5	0.50	22	--	80
--	1200	502	96	--	8.2	--	1.20	0.41	1.35	0.10	--	--	0.50	0.37	0.01	--	--	--	--	--
09/17/68	1200	--	8.2	71	8.3	313	23	6	33	4	--	--	22	14	1.1	0.6	0.45	22	--	82
--	1200	502	92	--	8.4	--	1.15	0.49	1.43	0.10	--	--	0.46	0.39	0.02	--	--	--	--	--
STATION NUMBER Z69780.00						RIO HONDO ABOVE SPREADING GROUNDS														
10/06/67	5050	1.48	10.0	72	7.5	943	73	29	98	5	0	161	254	85	7.5	0.6	0.18	--	675	302
0812	5050	250	114	--	7.5	--	3.64	2.38	4.26	0.13	0.00	2.64	5.29	2.40	0.12	--	--	--	632	170
							35	23	41	1	0	25	51	23	1					
11/08/67	5050	1.46	10.0	70	7.6	1067	75	28	108	6	0	157	264	91	9.5	0.6	0.21	--	698	302
082n	5050	178	111	--	7.3	--	3.74	2.30	4.70	0.15	0.00	2.57	5.50	2.57	0.15	--	--	--	660	174
							34	21	43	1	0	24	51	24	1					
12/15/67	5050	1.23	10.0	65	7.6	952	66	23	85	9	0	206	146	72	44.0	1.1	0.38	--	602	259
103n	5050	59.0	105	--	7.8	--	3.29	1.89	3.70	0.23	0.00	3.38	3.04	2.03	0.71	--	--	--	548	90
							36	21	41	2	0	37	33	22	8					
01/10/68	5050	1.36	9.8	56	7.6	1016	78	29	94	7	0	182	231	81	18.0	0.7	0.24	--	655	314
121n	5050	121	93	--	7.3	--	3.89	2.38	4.09	0.18	0.00	2.98	4.81	2.28	0.29	--	--	--	629	165
							37	23	39	2	0	29	46	22	3					
02/07/68	5050	1.38	10.2	62	7.8	1065	81	28	101	5	0	160	268	88	8.3	0.6	0.15	--	715	317
1145	5050	136	104	--	7.5	--	4.04	2.30	4.39	0.13	0.00	2.62	5.58	2.48	0.13	--	--	--	659	186
							37	21	40	1	0	24	52	23	1					
03/12/68	5050	1.46	10.0	61	7.9	1096	83	29	104	5	0	156	284	92	3.1	0.6	0.07	--	722	327
1306	5050	178	101	--	7.5	--	4.14	2.38	4.52	0.13	0.00	2.56	5.91	2.59	0.05	--	--	--	678	199
							37	21	40	1	0	23	53	23	0					
04/03/68	5050	1.37	9.6	66	7.4	1071	81	27	98	6	0	157	256	88	16.3	0.6	0.15	--	671	313
1625	5050	131	103	--	7.6	--	4.04	2.22	4.26	0.15	0.00	2.57	5.33	2.48	0.26	--	--	--	651	185
							38	21	40	1	0	24	50	23	2					
05/02/68	5050	1.30	8.8	64	8.0	1130	85	25	109	6	0	161	283	89	6.2	0.4	0.20	--	701	315
082n	5050	91.0	92	--	7.3	--	4.24	2.05	4.74	0.15	0.00	2.64	5.89	2.51	0.10	--	--	--	683	183
							38	18	42	1	0	24								

TABLE D-2
MINERAL ANALYSES OF SURFACE WATER

DATE TIME	LAB SAMPLER	GH O	DO SAT	TEMP	LABORATORY FIELD		MINERAL CONSTITUENTS IN				MILLIGRAMS PER MILLIEQUIVALENTS PER PERCENT			LITER PER LITER VALUE		MILLIGRAMS PER LITER			LITER TDS SUM	N	
					PH	EC	CA	MG	NA	K	CO3	HCO3	S04	CL	NO3	F	B	SI02			
STATION NUMBER Z69780.00 RIO HONDO ABOVE SPREADING GROUNDS																					
06/17/68	5050	--	9.2	76	7.8	845	52	21	78	8	0	186	112	64	29.1	0.9	0.32	--	519	2	
1210	5050	75.0	109	7.5	--	2.59	33	1.73	3.39	0.20	0.00	3.05	2.33	1.80	0.47				457	1	
									43	3	0	40	30	24	6						
09/16/68	5050	1.45	8.4	75	8.3	1106	81	30	107	5	0	150	298	94	1.2	0.5	0.12	--	700	3	
0835	5050	172	98	8.3	--	4.04	36	2.47	4.65	0.13	0.00	2.46	6.20	2.65	0.02				691	2	
									41	1	0	22	55	23	0						
STATION NUMBER Z71100.90 SAN GABRIEL RIVER AT WHITTIER NARROWS																					
10/06/67	5050	--	8.2	62	7.4	1015	84	26	103	11	0	232	161	108	54.0	0.6	0.56	--	710	3	
0835	5050	10.0	84	7.5	--	4.19	38	2.14	4.48	0.28	0.00	3.80	3.35	3.04	0.87				663	1	
									40	2	0	34	30	27	8						
11/08/67	5050	--	12.7	64	7.4	1151	74	32	110	19	0	234	165	119	36.0	0.8	0.52	--	730	3	
1010	5050	7.9	132	7.5	--	3.69	32	2.63	4.78	0.49	0.00	3.83	3.43	3.35	0.58				672	1	
									41	4	0	34	31	30	5						
12/15/67	5050	--	11.2	49	7.5	936	71	25	78	8	0	215	133	79	37.0	0.9	0.30	--	607	2	
1130	5050	30.0	98	7.5	--	3.54	38	2.05	3.39	0.20	0.00	3.52	2.77	2.23	0.60				538	1	
									37	2	0	39	30	24	6						
01/10/68	5050	--	11.5	53	7.3	1104	90	27	97	14	0	235	178	102	42.0	0.7	0.39	--	696	3	
1200	5050	14.5	105	7.5	--	4.49	40	2.22	4.22	0.36	0.00	3.85	3.70	2.88	0.68				667	1	
									37	3	0	35	33	26	6						
02/07/68	5050	--	8.3	64	7.2	1070	88	27	94	10	0	232	171	98	47.0	0.6	0.30	--	703	3	
1205	5050	11.5	86	7.7	--	4.39	40	2.22	4.09	0.25	0.00	3.80	3.56	2.76	0.76				650	1	
									37	2	0	35	33	25	7						
04/03/68	5050	--	7.3	72	7.5	953	83	22	74	8	0	194	153	83	39.9	0.6	0.27	--	582	2	
1710	5050	10.5	83	7.7	--	4.14	44	1.81	3.22	0.20	0.00	3.18	3.18	2.34	0.64				560	1	
									34	2	0	34	34	25	7						
07/26/68	5050	--	7.6	76	7.9	738	64	22	59	5	0	196	139	55	5.3	0.6	0.16	--	502	2	
1030	5050	93.0	90	8.2	--	3.19	41	1.81	2.57	0.13	0.00	3.21	2.89	1.55	0.08				447	1	
									33	2	0	41	37	20	1						
08/15/68	5050	--	8.1	70	7.6	870	70	27	82	5	0	188	189	74	7.0	0.6	0.16	--	607	2	
1030	5050	120	90	8.1	--	3.49	37	2.22	3.57	0.13	0.00	3.08	3.93	2.09	0.11				548	1	
									38	1	0	33	43	23	1						
09/16/68	5050	--	9.4	72	7.5	1005	75	30	90	7	0	168	243	88	7.0	0.6	0.14	--	670	3	
1015	5050	126	107	8.2	--	3.74	76	2.47	3.91	0.18	0.00	2.75	5.06	2.48	0.11				624	1	
									38	2	0	26	49	24	1						
STATION NUMBER Z71927.10 SAN GABRIEL RIVER AT AZUSA POWERHOUSE																					
10/06/67	5050	--	7.6	70	7.9	320	35	18	9	4	0	185	22	6	2.0	0.4	0.04	--	210	1	
0650	5050	80.0	85	7.5	--	1.75	47	1.48	0.39	0.10	0.00	3.03	0.46	0.17	0.03				188	1	
									10	3	0	82	12	5	1						
11/08/67	5050	--	11.1	60	8.0	362	45	15	10	3	0	205	18	5	0.5	0.4	0.06	--	210	1	
1100	5050	50.0	110	7.5	--	2.24	56	1.23	0.43	0.08	0.00	3.36	0.37	0.14	0.01				198	1	
									11	2	0	86	10	4	0						
12/15/67	5050	--	11.9	50	7.9	342	40	13	10	3	0	183	24	4	2.3	0.5	0.07	--	223	1	
1330	5050	100	105	7.5	--	1.99	56	1.07	0.43	0.08	0.00	3.00	0.50	0.11	0.04				187	1	
									12	2	0	82	14	3	1						
01/08/68	5050	--	12.0	46	7.9	358	44	14	10	4	0	194	24	4	2.0	0.4	0.07	--	210	1	
1300	5050	80.0	100	7.5	--	2.19	56	1.15	0.43	0.10	0.00	3.18	0.50	0.11	0.03				198	1	
									11	3	0	83	13	3	1						
02/07/68	5050	--	12.1	50	8.2	367	48	12	9	4	0	193	24	5	2.3	0.4	0.03	--	228	1	
1445	5050	80.0	107	7.7	--	2.39	62	0.99	0.39	0.10	0.00	3.16	0.50	0.14	0.04				200	1	
									10	3	0	82	13	4	1						
03/12/68	5050	--	11.1	54	8.1	345	45	11	8	3	0	180	22	4	2.3	0.4	0.00	--	203	1	
1515	5050	90.0	103	7.5	--	2.24	63	0.90	0.35	0.08	0.00	2.95	0.46	0.11	0.04				185	1	
									10	2	0	83	13	3	1						
05/02/68	5050	--	10.6	60	8.4	356	41	10	9	3	4	163	--	5	1.6	0.3	0.00	--	176	1	
1315	5050	70.0	105	7.5	--	2.04	61	0.82	0.39	0.08	0.13	2.67		0.14	0.02				154	1	
									12	2	4	90		5	1						
07/26/68	5050	--	--	76	8.3	333	41	13	8	2	13	148	25	8	1.5	0.5	0.07	--	153	1	
1230	5050	70.0	--	8.3	--	2.04	58	1.07	0.35	0.05	0.43	2.42	0.52	0.22	0.02				185	1	
									10	1	12	67	14	6	1						
08/15/68	5050	--	8.2	75	8.1	341	42	13	10	3	0	183	24	8	0.0	0.4	0.04	--	146	1	
1200	5050	70.0	96	8.3	--	2.09	57	1.07	0.43	0.08	0.00	3.00	0.50	0.22	0.00				191	1	
									12	2	0	80	13	6	0						
09/16/68	5050	--	8.1	73	8.1	341	41	13	9	5	0	181	27	8	0.0	0.4	0.04	--	197	1	
1205	5050	70.0	93	8.3	--	2.04	56	1.07	0.39	0.13	0.00	2.97	0.56	0.22	0.00				193	1	
									11	3	0	79	15	6	0						
STATION NUMBER Z75100.00 RIO HONDO AT WHITTIER NARROWS																					
10/06/67	5050	2.57	8.0	74	7.6	960	75	29	98	5	0	151	268	85	3.0	0.5	0.14	--	695	3	
0800	5050	250	93	7.5	--	3.74	36	2.38	4.26	0.13	0.00	2.47	5.58	2.40	0.05				638	1	
									40	1	0	24	53	23	0						

TABLE D-2
MINERAL ANALYSES OF SURFACE WATER

DATE TIME	LAB SAMPLER	GH O	DO SAT	TEMP	LABORATORY FIELD PH EC	MINERAL CONSTITUENTS IN				MILLIGRAMS PER CENT			PER REACTANCE		LITER LITER VALUE		MILLIGRAMS PER			LITER TH	
						CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SI02	SUM	NCH		
STATION NUMBER Z75100.00 RIO HONDO AT WHITTIER NARROWS																					
7/08/67	5050	2.23	10.3	70	8.1	1083	79	30	104	5	0	156	286	91	1.3	0.5	0.13	--	744	321	
0855	5050	1.48	115		7.6	--	3.94	2.47	4.52	0.13	0.00	2.56	5.95	2.57	0.02				674	193	
							36	22	41	1	0	23	54	23	0						
7/15/67	5050	1.26	5.7	62	7.4	918	93	29	58	4	0	275	183	46	9.3	0.8	0.15	--	615	352	
0945	5050	15.0	58		7.3	--	4.64	2.38	2.52	0.10	0.00	4.51	3.81	1.30	0.15				559	126	
							48	25	26	1	0	46	39	13	1						
1/10/68	5050	2.05	10.1	55	7.8	1079	78	34	100	5	0	166	279	89	2.3	0.6	0.15	--	608	335	
1150	5050	8.9	95		7.7	--	3.89	2.80	4.35	0.13	0.00	2.72	5.81	2.51	0.04				670	198	
							35	25	39	1	0	25	52	23	0						
7/07/68	5050	2.25	10.2	59	8.0	1094	82	31	102	5	0	154	289	93	2.3	0.5	0.09	--	728	332	
1115	5050	130	100		7.7	--	4.09	2.55	4.44	0.13	0.00	2.52	6.02	2.62	0.04				681	206	
							36	23	40	1	0	22	54	23	0						
3/12/68	5050	2.97	10.0	60	8.0	1100	84	29	104	5	0	154	290	93	2.3	0.6	0.07	--	741	329	
1245	5050	200	99		7.5	--	4.19	2.38	4.52	0.13	0.00	2.52	6.04	2.62	0.04				684	203	
							37	21	40	1	0	22	54	23	0						
4/03/68	5050	2.13	9.7	62	8.0	1096	84	30	99	5	0	154	286	90	2.3	0.6	0.14	--	729	333	
1640	5050	126	99		7.6	--	4.19	2.47	4.31	0.13	0.00	2.52	5.95	2.54	0.04				673	207	
							38	22	39	1	0	23	54	23	0						
5/02/68	5050	2.08	8.6	64	8.3	1150	86	31	100	5	0	155	298	92	2.4	0.3	0.10	--	717	342	
0805	5050	124	90		7.5	--	4.29	2.55	4.35	0.13	0.00	2.54	6.20	2.59	0.04				691	215	
							38	22	38	1	0	22	54	23	0						
5/21/68	1101	--	8.7	66	8.2	1100	85	29	115	6	0	154	303	115	1.7	--	--	--	810	332	
--	1101	--	93		--	--	4.24	2.38	5.00	0.15	0.00	2.52	6.31	3.24	0.03				731	205	
							36	20	42	1	0	21	52	27	0						
6/17/68	5050	--	11.0	74	7.7	729	75	22	47	4	0	239	128	33	4.5	0.7	0.11	--	478	278	
1200	5050	15.0	127		7.5	--	3.74	1.81	2.04	0.10	0.00	3.92	2.66	0.93	0.07				432	82	
							49	23	27	1	0	52	35	12	1						
6/19/68	1101	--	4.4	63	8.0	638	61	17	49	4	0	244	99	36	10.0	--	--	--	510	222	
0630	1101	--	45		--	--	3.04	1.40	2.13	0.10	0.00	4.00	2.06	1.01	0.16				396*	22	
							46	21	32	1	0	55	28	14	2						
7/17/68	1101	--	1.6	68	7.8	939	79	20	100	7	0	248	191	76	4.3	--	--	--	788	280	
0630	1101	--	17		--	--	3.94	1.64	4.35	0.18	0.00	4.06	3.98	2.14	0.07				600	76	
							39	16	43	2	0	40	39	21	1						
7/26/68	5050	1.18	13.6	78	8.0	878	78	28	74	5	0	263	155	65	6.2	1.0	0.26	--	614	310	
1000	5050	14.8	164		8.2	--	3.89	2.30	3.22	0.13	0.00	4.31	3.23	1.83	0.10				542	94	
							41	24	34	1	0	45	34	19	1						
8/16/68	1101	--	0.8	68	8.1	876	73	18	96	6	0	233	168	69	7.9	--	--	--	671	256	
0615	1101	--	9		--	--	3.64	1.48	4.17	0.15	0.00	3.82	3.50	1.94	0.13				553	65	
							38	16	44	2	0	41	37	21	1						
8/16/68	5050	1.00	6.0	68	7.5	846	83	24	71	4	0	261	157	54	4.0	0.9	0.17	--	578	306	
0900	5050	7.5	65		7.9	--	4.14	1.97	3.09	0.10	0.00	4.28	3.27	1.52	0.06				527	92	
							44	21	33	1	0	47	36	17	1						
9/16/68	5050	2.79	7.8	76	8.2	1086	80	31	107	5	0	144	305	95	1.3	0.5	0.16	--	711	327	
0910	5050	245	92		8.2	--	3.99	2.55	4.65	0.13	0.00	2.36	6.35	2.68	0.02				696	209	
							35	22	41	1	0	21	56	23	0						
STATION NUMBER Z76150.00 MISSION CREEK AT WHITTIER NARROWS																					
1/06/67	5050	6.75	7.2	64	7.9	876	128	31	29	5	0	276	209	42	15.0	0.4	0.08	--	665	447	
0745	5050	15.0	75		7.3	--	6.39	2.55	1.26	0.13	0.00	4.52	4.35	1.18	0.24				596	221	
							62	25	12	1	0	44	42	11	2						
7/08/67	5050	6.47	10.0	64	8.1	909	128	32	24	3	0	300	210	28	8.8	0.6	0.10	--	661	451	
0940	5050	1.6	104		7.4	--	6.39	2.63	1.04	0.08	0.00	4.92	4.37	0.79	0.14				582	205	
							63	26	10	1	0	48	43	8	1						
7/15/67	5050	6.72	7.2	68	7.5	854	101	38	24	3	0	258	202	26	9.0	0.6	0.12	--	6180000		
1100	5050	10.0	78		7.4	--	5.04	3.12	1.04	0.08	0.00	4.23	4.20	0.73	0.14				531	*	
							54	34	11	1	0	45	45	8	2						
7/10/68	5050	6.75	9.3	58	7.5	869	120	33	22	4	0	283	199	25	11.3	0.5	0.10	--	594	435	
1135	5050	6.0	90		7.2	--	5.99	2.71	0.96	0.10	0.00	4.64	4.14	0.70	0.18				554	203	
							61	28	10	1	0	48	43	7	2						
7/07/68	5050	6.80	6.5	60	7.9	887	126	31	23	3	0	281	196	29	13.0	0.5	0.08	--	615	442	
1055	5050	7.3	65		7.3	--	6.29	2.55	1	0.08	0.00	4.60	4.08	0.82	0.21				560	212	
							63	26	10	1	0	47	42	8	2						
1/12/68	5050	6.93	6.0	61	7.7	798	112	25	20	4	0	251	170	27	11.6	0.5	0.06	--	551	382	
1225	5050	0.4	60		7.1	--	5.59	2.05	0.87	0.10	0.00	4.11	3.54	0.76	0.19				494	177	
							65	24	10	1	0	48	41	9	2						
7/03/68	5050	6.83	7.1	66	7.8	841	92	28	22	4	0	187	178	28	11.5	0.5	0.11	--	607	345	
1655	5050	8.3	76		7.2	--	4.59	2.30	0.96	0.10	0.00	3.06	3.70	0.79	0.18				457	192	
							58	29	12	1	0	40	48	10	2						
7/02/68	5050	6.59	8.8	65	8.1	860	119	25	25	3	0	263	186	29	10.0	0.3	0.10	--	526	400	
0830	5050	5.0	93		7.3	--	5.94	2.05	1.09	0.08	0.00	4.31	3.87	0.82	0.16				527	184	
							65	22	12	1	0	47	42	9	2						

TABLE O-2
MINERAL ANALYSES OF SURFACE WATER

DATE TIME	LAB SAMPLER	GH Q	DO SAT	TEMP	LABORATORY FIELD	MINERAL CONSTITUENTS IN				MILLIGRAMS PER MILLIEQUIVALENTS PER			LITER PER LITER VALUE		MILLIGRAMS PER			LITER TOS SUM	T NC																				
						PH	EC	CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F			B	SI02																		
STATION NUMBER Z76150.00																				MISSION CREEK AT WHITTIER NARROWS																			
06/17/68	5050	--	9.4	70	7.5	821	110	28	24	2	0	271	172	27	9.9	0.9	0.09	--	592	39																			
122h	5050	2.6	105		7.3	--	5.49	2.30	1.04	0.05	0.00	4.44	3.58	0.76	0.16				508	16																			
							62	26	12	1	0	50	40	8	2																								
07/26/68	5050	6.08	8.2	70	8.1	762	99	29	23	2	0	235	173	35	4.5	0.5	0.10	--	494	36																			
1100	5050	1.8	91		8.0	--	4.94	2.38	1	0.05	0.00	3.85	3.60	0.99	0.07				482	17																			
							59	28	12	1	0	45	42	12	1																								
08/15/68	5050	6.02	7.1	66	7.8	731	101	26	23	2	0	252	159	31	6.0	0.5	0.10	--	482	35																			
0945	5050	1.6	76		7.9	--	5.04	2.14	1	0.05	0.00	4.13	3.31	0.87	0.10				473	15																			
							61	26	12	1	0	49	39	10	1																								
09/16/68	5050	6.10	6.9	67	7.6	776	107	29	22	4	0	279	163	29	8.0	0.5	0.09	--	534	38																			
0955	5050	2.1	74		7.9	--	5.34	2.38	0.96	0.10	0.00	4.57	3.39	0.82	0.13				500	15																			
							61	27	11	1	0	51	38	9	1																								
STATION NUMBER V91620.00																				MOJAVE RIVER NEAR VICTORVILLE																			
10/05/67	5050	--	12.5	58	7.8	519	40	13	56	5	0	224	44	32	6.5	0.6	0.08	--	365	15																			
0700	5050	20.0	122		--	--	1.99	1.07	2.43	0.13	0.00	3.67	0.92	0.90	0.10				308																				
							35	19	43	2	0	66	16	16	2																								
11/09/67	5050	--	9.3	66	7.9	493	40	10	52	5	0	217	36	29	4.0	0.6	0.08	--	310	14																			
1400	5050	27.0	100		--	--	1.99	0.82	2.26	0.13	0.00	3.56	0.75	0.82	0.06				284																				
							38	16	43	2	0	68	14	16	1																								
12/13/67	5050	1.83	11.2	40	7.5	478	39	10	44	5	0	205	38	24	4.5	0.5	0.12	--	287	13																			
0945	5050	42.0	86		7.8	--	1.95	0.82	1.91	0.13	0.00	3.36	0.79	0.68	0.07				266																				
							40	17	40	3	0	69	16	14	1																								
01/12/68	5050	--	10.6	53	8.1	437	41	9	45	5	0	199	38	22	4.5	0.5	0.07	--	275	12																			
1240	5050	38.0	97		--	--	2.04	0.74	1.96	0.13	0.00	3.26	0.79	0.62	0.07				263																				
							42	15	40	3	0	69	17	13	1																								
02/09/68	5050	--	11.3	53	7.9	451	40	9	40	4	0	189	35	20	5.5	0.5	0.05	--	276	11																			
0855	5050	50.0	104		--	--	1.99	0.74	1.74	0.10	0.00	3.10	0.73	0.56	0.09				247																				
							44	16	38	2	0	69	16	13	2																								
03/13/68	5050	1.90	8.6	54	7.9	475	42	10	42	4	0	201	36	24	4.8	0.5	0.06	--	298	10																			
1045	5050	34.0	80		--	--	2.09	0.82	1.83	0.10	0.00	3.29	0.75	0.68	0.08				263																				
							43	17	38	2	0	69	16	14	2																								
04/02/68	5050	1.90	10.6	67	8.2	506	42	11	48	5	0	211	38	25	3.0	0.6	0.11	--	317	9																			
1245	5050	28.0	114		--	--	2.09	0.90	2.09	0.13	0.00	3.46	0.79	0.70	0.05				277																				
							40	17	40	2	0	69	16	14	1																								
05/01/68	5050	1.85	10.5	62	8.2	517	44	11	44	5	0	205	40	28	5.0	0.4	0.10	--	293	8																			
0830	5050	23.0	107		--	--	2.19	0.90	1.91	0.13	0.00	3.36	0.83	0.79	0.08				279																				
							43	18	37	2	0	66	16	16	2																								
06/13/68	5050	--	5.6	83	7.1	504	42	10	48	5	0	200	44	26	3.7	0.6	0.11	--	323	7																			
1230	5050	19.0	71		--	--	2.09	0.82	2.09	0.13	0.00	3.28	0.92	0.73	0.06				278																				
							41	16	41	2	0	66	18	15	1																								
07/24/68	5050	1.75	9.3	78	8.1	543	45	10	56	6	0	221	49	32	2.0	0.7	0.15	--	345	6																			
0900	5050	11.0	112		8.0	--	2.24	0.82	2.43	0.15	0.00	3.62	1.02	0.90	0.03				310																				
							40	14	43	3	0	65	18	16	1																								
STATION NUMBER V92150.30																				MOJAVE RIVER AT THE FORKS																			
10/05/67	5050	--	11.2	54	7.2	154	12	5	12	2	0	73	5	9	1.5	0.3	0.04	--	115	5																			
0745	5050	150 E	104		--	--	0.60	0.41	0.52	0.05	0.00	1.20	0.10	0.25	0.02				83																				
							38	26	33	3	0	76	7	16	1																								
11/09/67	5050	--	8.7	60	8.1	250	19	5	27	2	0	112	23	7	0.0	1.5	0.06	--	160	4																			
1445	5050	5 E	86		--	--	0.95	0.41	1.17	0.05	0.00	1.83	0.48	0.20	0.00				140																				
							37	16	45	2	0	73	19	8	0																								
12/13/67	5050	--	12.5	37	7.8	236	22	6	17	2	0	112	15	9	0.5	0.6	0.04	--	148	3																			
1230	5050	20 E	92		7.9	--	1.10	0.49	0.74	0.05	0.00	1.83	0.31	0.25	0.01				128																				
							46	21	31	2	0	76	13	10	0																								
01/12/68	5050	--	12.3	46	7.7	180	17	4	16	1	0	88	12	7	0.5	0.7	0.01	--	114	2																			
1345	5050	30 E	103		--	--	0.85	0.33	0.69	0.02	0.00	1.44	0.25	0.20	0.01				102																				
							45	17	37	1	0	76	13	10	0																								
03/12/68	5050	--	9.4	57	7.9	188	19	4	13	2	0	88	9	8	1.2	0.4	0.00	--	136	1																			
1115	5050	8 E	91		--	--	0.95	0.33	0.56	0.05	0.00	1.44	0.19	0.22	0.02				100																				
							50	17	30	3	0	77	10	12	1																								
04/02/68	5050	--	14.9	53	7.8	158	13	4	12	1	0	76	5	6	0.0	0.5	0.00	--	118	0																			
1100	5050	40 E	137		--	--	0.65	0.33	0.52	0.02	0.00	1.24	0.10	0.17	0.00				79																				
							42	22	34	2	0	82	7	11	0																								
07/24/68	5050	--	13.0	83	8.9	327	22	4	38	3	6	88	56	10	0.0	2.4	0.09	--	212	0																			
1015	5050	5 E	165		8.4	--	1.10	0.33	1.65	0.08	0.20	1.44	1.16	0.28	0.00				185																				
							35	10	52	2	6	47	38	9	0																								
STATION NUMBER V92200.00																				MOJAVE RIVER WEST FORK BELOW CEDAR SPRINGS																			
04/03/68	5050	5.02	9.8	63	7.9	231	23	6	13	2	0	103	15	8	4.3	0.2	0.03	--	143	2																			
153h	5064	50.0	101		7.2	--	1.15	0.49	0.56	0.05	0.00	1.69	0.31	0.22	0.07				123	0																			
							51	22	25	2	0	73	14	10	3																								

TABLE D-2
MINERAL ANALYSES OF SURFACE WATER

DATE TIME	LAB SAMPLER	GH O	DO SAT	TEMP	LABORATORY FIELD	PH	EC	MINERAL CONSTITUENTS IN				MILLIGRAMS PER LITER			MILLIGRAMS PER LITER			TDS SUM	TH NCH	
								CA	MG	NA	K	PERCENT CO3	PER HCO3	PER S04	PER CL	PER NO3	F			B
STATION NUMBER V92200.00 MOJAVE RIVER WEST FORK BELOW CEDAR SPRINGS																				
05/03/68	5050	4.76	8.6	77	7.8	280	28	9	16	2	0	134	13	11	0.5	0.2	0.05	--	174	107
1500	5064	25.0	103		7.3	--	1.40	0.74	0.69	0.05	0.00	2.20	0.27	0.31	0.01				146	0
							48	26	24	2	0	79	10	11	0					
06/10/68	5050	4.60	9.9	76	7.6	327	34	9	18	2	0	161	12	10	0.0	0.2	0.05	--	197	122
1400	5064	5.0	117		7.0	--	1.70	0.74	0.78	0.05	0.00	2.64	0.25	0.28	0.00				165	0
							52	23	24	2	0	83	8	9	0					
09/11/68	5050	4.50	5.3	58	8.2	354	40	10	20	3	0	193	9	10	0.6	0.3	0.03	--	223	141
0830	5064	1 E	52		7.1	--	1.99	0.82	0.87	0.08	0.00	3.16	0.19	0.28	0.01				188	0
							53	22	23	2	0	87	5	8	0					
STATION NUMBER V92250.00 MOJAVE RIVER EAST FORK OF THE WEST FORK																				
10/06/67	5050	2.75	10.7	52	7.9	241	24	6	15	2	0	106	9	17	3.0	0.2	0.05	--	164	85
0900	5064	1.0	97		8.3	--	1.20	0.49	0.65	0.05	0.00	1.74	0.19	0.48	0.05				129	0
							50	21	27	2	0	71	8	19	2					
11/09/67	5050	2.53	10.0	52	7.3	251	24	6	17	2	0	112	8	14	1.0	0.2	0.06	--	152	85
1030	5064	3.0	90		8.3	--	1.20	0.49	0.74	0.05	0.00	1.83	0.17	0.39	0.02				128	0
							48	20	30	2	0	76	7	16	1					
01/10/68	5050	2.92	11.8	41	7.6	202	15	8	14	2	0	81	13	12	9.5	0.2	0.05	--	113	70
0930	5064	30.0	92		7.2	--	0.75	0.66	0.61	0.05	0.00	1.33	0.27	0.34	0.15				114	4
							36	32	29	2	0	63	13	16	7					
03/04/68	5050	3.08	10.0	57	7.9	202	19	4	13	1	0	81	11	10	6.3	0.2	0.05	--	134	64
1330	5064	20.0	96		7.2	--	0.95	0.33	0.56	0.02	0.00	1.33	0.23	0.28	0.10				105	0
							51	18	30	1	0	68	12	14	5					
05/03/68	5050	2.77	9.0	65	7.9	209	18	6	14	2	0	88	7	12	2.8	0.2	0.07	--	111	70
1245	5064	--	95		7.0	--	0.90	0.49	0.61	0.05	0.00	1.44	0.14	0.34	0.04				106	0
							44	24	30	2	0	73	7	17	2					
06/10/68	5050	2.67	8.9	64	7.7	228	20	6	15	1	0	90	10	13	4.0	0.2	0.03	--	143	75
1215	5064	10.0	93		7.0	--	1.00	0.49	0.65	0.02	0.00	1.47	0.21	0.37	0.06				114	1
							47	23	30	1	0	70	10	17	3					
STATION NUMBER V92300.00 MOJAVE RIVER WEST FORK ABOVE CEDAR SPRINGS																				
10/06/67	5050	1.57	10.2	57	8.2	445	52	17	15	4	0	214	47	13	0.0	0.4	0.02	--	339	200
0935	5064	1.5	98		8.5	--	2.59	1.40	0.65	0.10	0.00	3.51	0.98	0.37	0.00				254	24
							55	29	14	2	0	72	20	7	0					
11/09/67	5050	1.50	10.9	58	7.9	443	55	15	15	4	0	210	47	8	0.0	0.2	0.00	--	272	199
1130	5064	2.0	100		8.5	--	2.74	1.23	0.65	0.10	0.00	3.44	0.98	0.22	0.00				248	27
							58	26	14	2	0	74	21	5	0					
01/11/68	5050	1.72	11.7	42	8.0	352	40	14	12	3	0	161	41	7	5.3	0.2	0.00	--	209	157
1030	5064	10.0	92		7.8	--	1.99	1.15	0.52	0.08	0.00	2.64	0.85	0.20	0.08				202	25
							53	31	14	2	0	70	23	5	2					
04/03/68	5050	1.71	9.4	59	8.2	319	38	10	11	3	0	146	31	7	3.8	0.2	0.00	--	206	136
1430	5064	10.0	93		7.3	--	1.90	0.82	0.48	0.08	0.00	2.39	0.64	0.20	0.06				176	16
							58	25	15	2	0	73	20	6	2					
05/03/68	5050	1.87	8.4	68	8.3	361	43	13	12	3	0	168	36	7	0.0	0.2	0.03	--	206	161
1400	5064	15.0	92		7.2	--	2.14	1.07	0.52	0.08	0.00	2.75	0.75	0.20	0.00				197	23
							56	28	14	2	0	74	20	5	0					
06/10/68	5050	1.67	8.4	69	7.9	397	47	14	13	3	0	183	40	8	0.0	0.2	0.00	--	233	175
1300	5064	5.0	93		7.1	--	2.34	1.15	0.56	0.08	0.00	3.00	0.83	0.22	0.00				216	25
							57	28	14	2	0	74	20	6	0					
09/11/68	5050	1.50	0.6	65	8.0	537	72	17	21	4	0	298	35	9	0.0	0.3	0.00	--	330	250
0900	5064	1 E	6		7.3	--	3.59	1.40	0.91	0.10	0.00	4.88	0.73	0.25	0.00				305	5
							60	23	15	2	0	83	12	4	0					
STATION NUMBER W21530.00 COLORADO RIVER NEAR TOPOCK																				
07/17/68	5050	--	7.8	65	8.0	1088	85	30	107	5	0	153	293	97	2.6	0.5	0.14	--	775	336
0830	5050	18300	82		--	--	4.24	2.47	4.65	0.13	0.00	2.51	6.10	2.73	0.04				696	210
							37	21	40	1	0	22	54	24	0					
09/11/68	5050	4.20	7.3	67	8.0	1092	84	30	107	5	0	154	301	95	2.5	0.5	0.15	--	695	333
1035	5050	12000	79		8.0	--	4.19	2.47	4.65	0.13	0.00	2.52	6.27	2.68	0.04				701	207
							37	22	41	1	0	22	54	23	0					
STATION NUMBER W21775.10 COLORADO RIVER BELOW PARKER DAM																				
07/16/68	5050	22.34	7.9	77	8.1	1099	83	31	109	5	0	151	302	95	1.8	0.5	0.10	--	790	335
1620	5050	18500	94		--	--	4.14	2.55	4.74	0.13	0.00	2.47	6.29	2.68	0.03				702	211
							36	22	41	1	0	22	55	23	0					
09/11/68	5050	19.13	6.7	77	8.0	1092	82	30	108	5	0	149	300	97	1.5	0.5	0.14	--	700	328
0630	5050	4790	80		8.1	--	4.09	2.47	4.70	0.13	0.00	2.44	6.25	2.73	0.02				698	206
							36	22	41	1	0	21	55	24	0					

TABLE O-2
MINERAL ANALYSES OF SURFACE WATER

DATE TIME	LAB SAMPLER	GH Q	DO SAT	TEMP	LABORATORY FIELD	MINERAL CONSTITUENTS IN				MILLIGRAMS PER LITER			MILLIEQUIVALENTS PER LITER			MILLIGRAMS PER LITER			LITER TOS SUM	
						PH	EC	CA	MG	NA	K	CO3	HCO3	S04	CL	NO3	F	B		SI02
STATION NUMBER W21960.00 COLORADO RIVER AQUEDUCT AT COLORADO RIVER INTAKE (LAKE MAVASU)																				
10/08/67	4412	--	--	--	8.1	955	79	30	102	5	0	140	295	87	1.0	0.4	--	10	679	3
--	4412	--	--	--	--	--	3.94	2.47	4.44	0.13	0.00	2.29	6.14	2.45	0.02	--	--	--	679	2
							36	22	40	1	0	21	56	22	0					
11/08/67	4412	--	--	68	8.2	1140	82	29	104	4	0	143	295	90	0.6	0.4	--	9	686	3
1130	4412	--	--	--	--	--	4.09	2.38	4.52	0.10	0.00	2.34	6.14	2.54	0.01	--	--	--	685	2
							37	21	41	1	0	21	56	23	0					
12/06/67	4412	--	--	61	8.1	1083	81	30	100	5	0	144	293	90	0.9	0.4	--	9	682	3
--	4412	--	--	--	--	--	4.04	2.47	4.35	0.13	0.00	2.36	6.10	2.54	0.01	--	--	--	681	2
							37	22	40	1	0	21	55	23	0					
01/08/68	4412	--	--	52	8.2	1090	83	31	97	5	1	146	292	88	1.0	0.5	--	10	681	3
--	4412	--	--	--	--	--	4.14	2.55	4.22	0.13	0.03	2.39	6.08	2.48	0.02	--	--	--	681	2
							37	23	38	1	0	22	55	22	0					
02/07/68	4412	--	--	53	8.4	1090	83	30	100	4	0	149	288	90	1.4	0.4	--	9	680	3
--	4412	--	--	--	--	--	4.14	2.47	4.35	0.10	0.00	2.44	6.00	2.54	0.02	--	--	--	680	2
							37	22	39	1	0	22	54	23	0					
03/06/68	4412	--	--	61	8.3	1080	83	30	98	4	0	149	288	88	1.3	0.3	--	9	676	3
--	4412	--	--	--	--	--	4.14	2.47	4.26	0.10	0.00	2.44	6.00	2.48	0.02	--	--	--	675	2
							38	22	39	1	0	22	55	23	0					
04/08/68	4412	--	--	66	8.4	1090	85	30	103	5	2	146	295	91	1.4	0.4	--	8	694	3
--	4412	--	--	--	--	--	4.24	2.47	4.48	0.13	0.07	2.39	6.14	2.57	0.02	--	--	--	693	2
							37	22	40	1	1	21	55	23	0					
05/08/68	4412	--	--	71	8.5	1082	76	30	106	5	4	117	302	93	0.8	0.4	--	3	678	3
--	4412	--	--	--	--	--	3.79	2.47	4.61	0.13	0.13	1.92	6.29	2.62	0.01	--	--	--	678	2
							34	22	42	1	1	17	57	24	0					
06/09/68	4412	--	--	70	8.5	1120	85	31	105	5	4	145	300	96	1.2	0.4	--	8	708	3
--	4412	--	--	--	--	--	4.24	2.55	4.57	0.13	0.13	2.38	6.25	2.71	0.02	--	--	--	707	2
							37	22	40	1	1	21	54	24	0					
07/08/68	4412	--	--	81	8.4	1100	80	32	105	5	1	137	301	94	1.0	0.4	--	8	695	3
--	4412	--	--	--	--	--	3.99	2.63	4.57	0.13	0.03	2.24	6.27	2.65	0.02	--	--	--	695	2
							35	23	40	1	0	20	56	24	0					
07/09/68	5056	--	--	--	8.3	1120	80	31	108	5	0	142	303	95	--	--	--	--	755	3
--	5056	--	--	--	--	--	3.99	2.55	4.70	0.13	0.00	2.33	6.31	2.68	--	--	--	--	692	2
							35	22	41	1	0	21	56	24						
07/23/68	5056	--	--	--	7.7	1100	79	31	108	5	0	138	303	96	--	--	--	--	753	3
--	5056	--	--	--	--	--	3.94	2.55	4.70	0.13	0.00	2.26	6.31	2.71	--	--	--	--	690	2
							35	22	41	1	0	20	56	24						
08/06/68	5056	--	--	--	7.7	1110	79	31	108	5	0	138	304	95	--	--	--	--	765	3
--	5056	--	--	--	--	--	3.94	2.55	4.70	0.13	0.00	2.26	6.33	2.68	--	--	--	--	690	2
							35	22	41	1	0	20	56	24						
08/07/68	4412	--	--	81	8.4	1100	78	31	111	5	2	126	306	96	0.8	0.4	--	8	701	3
1420	4412	--	--	--	--	--	3.89	2.55	4.83	0.13	0.07	2.06	6.37	2.71	0.01	--	--	--	701	2
							34	22	42	1	1	18	57	24	0					
09/03/68	5056	--	--	--	7.8	1120	80	31	107	5	0	141	308	95	--	--	--	--	742	3
--	5056	--	--	--	--	--	3.99	2.55	4.65	0.13	0.00	2.31	6.41	2.68	--	--	--	--	696	2
							35	22	41	1	0	20	56	23						
09/08/68	4412	--	--	82	8.5	1108	76	32	105	5	2	121	308	94	0.9	0.5	--	9	692	3
--	4412	--	--	--	--	--	3.79	2.63	4.57	0.13	0.07	1.98	6.41	2.65	0.01	--	--	--	692	2
							34	24	41	1	1	18	58	24	0					
09/17/68	5056	--	--	--	7.7	1120	82	31	107	5	--	146	307	95	--	--	--	--	744	3
--	5056	--	--	--	--	--	4.09	2.55	4.65	0.13	--	2.39	6.39	2.68	--	--	--	--	699	2
							36	22	41	1		21	56	23						
STATION NUMBER W21985.05 COLORADO RIVER AQUEDUCT UPPER FEEDER AT LA VERNE																				
10/00/67	4412	--	--	74	8.4	1130	80	30	105	5	1	137	298	93	0.7	0.4	--	9	691	3
--	4412	--	--	--	--	--	3.99	2.47	4.57	0.13	0.03	2.24	6.20	2.62	0.01	--	--	--	690	2
							36	22	41	1	0	20	56	24	0					
11/00/67	4412	--	--	68	8.3	1080	80	31	100	4	1	133	294	91	0.7	0.4	--	9	677	3
--	4412	--	--	--	--	--	3.99	2.55	4.35	0.10	0.03	2.18	6.12	2.57	0.01	--	--	--	677	2
							36	23	40	1	0	20	56	23	0					
12/00/67	4412	--	--	60	8.2	1090	81	31	104	5	1	144	298	92	0.4	0.4	0.11	9	693	3
--	4412	--	--	--	--	--	4.04	2.55	4.52	0.13	0.03	2.36	6.20	2.59	0.01	--	--	--	693	2
							36	23	40	1	0	21	55	23	0					
01/00/68	4412	--	--	56	8.3	1095	82	31	102	5	1	145	300	90	0.2	0.4	--	10	693	3
--	4412	--	--	--	--	--	4.09	2.55	4.44	0.13	0.03	2.38	6.25	2.54	0.00	--	--	--	693	2
							36	23	40	1	0	21	56	23	0					
02/00/68	4412	--	--	56	8.3	1100	84	30	103	4	1	146	298	92	0.8	0.4	--	9	695	3
--	4412	--	--	--	--	--	4.19	2.47	4.48	0.10	0.03	2.39	6.20	2.59	0.01	--	--	--	694	2
							37	22	40	1	0	21	55	23	0					
03/00/68	4412	--	--	58	8.3	1100	84	30	102	5	1	146	296	93	0.9	0.4	--	9	695	3
--	4412	--	--	--	--	--	4.19	2.47	4.44	0.13	0.03	2.39	6.16	2.62	0.01	--	--	--	694	2
							37	22	39	1	0	21	55	23	0					

TABLE D-2
MINERAL ANALYSES OF SURFACE WATER

DATE TIME	LAB SAMPLER	GH Q	DO SAT	TEMP	LABORATORY FIELD PH EC	MINERAL CONSTITUENTS IN				MILLIGRAMS PER LITER			MILLIGRAMS PER LITER			LITER				
						CA	MG	NA	K	PERCENT CO3	PER REACTANCE HCO3	PER LITER VALUE SO4	CL	NO3	F	B	SI02	TDS SUM	TH NCH	
STATION NUMBER W21985.05 COLORADO RIVER AQUEDUCT UPPER FEEDER AT LA VERNE																				
4/00/68	4412	--	--	62	8.4	1080	84	30	104	4	2	145	295	94	1.0	0.4	--	9	696	333
--	4412	--	--	--	--	--	4.19	2.47	4.52	0.10	0.07	2.38	6.14	2.65	0.02				695	211
							37	22	40	1	1	21	55	24	0					
5/00/68	4412	--	--	65	8.5	1110	84	31	105	5	4	143	298	95	1.1	0.4	--	8	703	337
--	4412	--	--	--	--	--	4.19	2.55	4.57	0.13	0.13	2.34	6.20	2.68	0.02				702	213
							37	22	40	1	1	21	54	23	0					
6/00/68	4412	--	--	70	8.5	1100	83	31	104	5	2	142	298	96	0.7	0.4	0.11	8	699	335
--	4412	--	--	--	--	--	4.14	2.55	4.52	0.13	0.07	2.33	6.20	2.71	0.01				698	215
							36	22	40	1	1	21	55	24	0					
7/00/68	4412	--	--	73	8.3	1105	84	31	107	5	1	143	301	97	1.1	0.4	--	8	706	337
--	4412	--	--	--	--	--	4.19	2.55	4.65	0.13	0.03	2.34	6.27	2.73	0.02				706	218
							36	22	40	1	0	21	55	24	0					
8/00/68	4412	--	--	76	8.4	1100	80	32	103	5	1	135	298	95	0.8	0.4	--	7	690	331
--	4412	--	--	--	--	--	3.99	2.63	4.48	0.13	0.03	2.21	6.20	2.68	0.01				689	219
							35	23	40	1	0	20	56	24	0					
9/00/68	4412	--	--	74	8.3	1110	81	32	105	5	1	138	307	96	0.5	0.4	--	9	705	334
--	4412	--	--	--	--	--	4.04	2.63	4.57	0.13	0.03	2.26	6.39	2.71	0.01				705	219
							35	23	40	1	0	20	56	24	0					
STATION NUMBER W31070.00 WHITEWATER RIVER NEAR MECCA																				
1/03/67	5050	--	10.1	69	8.1	3175	157	43	525	12	0	332	832	405	30.0	3.2	0.94	--	2230	569
0945	5050	120 E	111	--	--	--	7.83	3.54	22.84	0.31	0.00	5.44	17.32	11.42	0.48				2172	297
							23	10	66	1	0	16	50	33	1					
1/22/68	5050	--	8.9	69	7.9	3102	158	42	538	11	0	322	829	419	24.8	2.8	0.82	--	2274	567
142A	5050	70 E	98	8.3	--	--	7.88	3.45	23.40	0.28	0.00	5.28	17.26	11.81	0.40				2184	303
							22	10	67	1	0	15	50	34	1					
3/04/68	5050	--	9.3	70	7.5	3336	167	44	532	11	0	327	841	401	31.0	3.0	0.86	--	2289	598
1105	5050	90 E	104	--	--	--	8.33	3.62	23.14	0.28	0.00	5.36	17.51	11.31	0.50				2192	330
							24	10	65	1	0	15	50	33	1					
5/06/68	5050	--	9.1	76	8.3	3440	168	46	494	12	0	328	850	386	28.0	3.2	0.90	--	2260	609
1305	5050	85 E	107	--	--	--	8.38	3.78	21.49	0.31	0.00	5.37	17.70	10.88	0.45				2150	340
							25	11	63	1	0	16	51	32	1					
9/09/68	5050	--	6.7	70	7.9	3120	168	43	480	14	0	312	805	372	35.7	3.1	0.90	--	2142	596
1415	5050	70 E	75	8.3	--	--	8.38	3.54	20.88	0.36	0.00	5.11	16.76	10.49	0.57				2076	341
							25	11	63	1	0	15	51	32	2					
STATION NUMBER W31450.00 WHITEWATER RIVER NEAR WHITEWATER																				
1/03/67	5050	--	10.0	68	8.4	377	49	12	13	4	19	161	31	4	1.5	1.0	0.02	--	225	172
1120	5050	35.0	109	--	--	--	2.44	0.99	0.56	0.10	0.63	2.64	0.64	0.11	0.02				214	8
							60	24	14	2	16	65	16	3	1					
1/22/68	5050	1.20	9.0	60	8.2	364	48	13	14	4	0	200	34	4	1.8	0.9	0.00	--	219	173
1120	5050	2.4	89	8.4	--	--	2.39	1.07	0.61	0.10	0.00	3.28	0.71	0.11	0.03				218	9
							57	26	15	2	0	79	17	3	1					
3/04/68	5050	1.30	9.0	59	8.3	384	48	12	12	4	0	193	32	4	1.6	0.9	0.00	--	234	169
0910	5050	4.4	89	--	--	--	2.39	0.99	0.52	0.10	0.00	3.16	0.67	0.11	0.02				210	11
							60	25	13	2	0	80	17	3	1					
5/06/68	5050	--	8.3	68	8.3	394	44	13	14	5	0	182	34	6	1.2	1.1	0.00	--	191	163
1150	5050	2.8	90	7.8	--	--	2.19	1.07	0.61	0.13	0.00	2.98	0.71	0.17	0.02				208	14
							55	27	15	3	0	77	18	4	0					
9/09/68	5050	1.28	7.2	80	8.1	378	48	13	14	5	0	196	37	4	1.7	1.0	0.00	--	219	173
1545	5050	4.0	89	8.4	--	--	2.39	1.07	0.61	0.13	0.00	3.21	0.77	0.11	0.03				221	13
							57	25	14	3	0	78	19	3	1					
STATION NUMBER W51600.70 SALTON SEA AT SALTON SEA STATE PARK																				
1/03/67	5050	32.50	9.3	72	7.6	42280	850	1057	10500	170	0	212	7879	15000	4.0	3.2	9.20	--	36650	6472
0910	5050	--	106	--	--	--	42.41	86.93	456.75	4.35	0.00	3.47	164.04	423.00	0.06				35577	6298
							7	15	77	1	0	1	28	72	0					
1/22/68	5050	32.14	--	--	7.0	40816	834	1020	9900	162	0	228	7583	14241	5.3	3.8	8.00	--	35286	6280
1535	5050	--	--	--	8.5	--	41.62	83.88	430.65	4.14	0.00	3.74	157.88	401.60	0.08				33870	6093
							7	15	77	1	0	1	28	71	0					
3/04/68	5050	31.60	9.8	73	8.2	41186	813	995	9700	156	0	183	7397	13938	4.8	3.2	7.60	--	34463	6125
1200	5050	--	112	8.1	--	--	40.57	81.83	421.95	3.99	0.00	3.00	154.00	393.05	0.08				33105	5975
							7	15	77	1	0	0	28	71	0					
5/06/68	5050	32.31	6.6	75	7.7	47200	912	1010	10400	190	0	153	8010	14600	1.5	2.3	7.30	--	37700	6434
1335	5050	--	77	7.9	--	--	45.51	83.06	452.40	4.86	0.00	2.51	166.77	411.72	0.02				35209	6308
							8	14	77	1	0	0	29	71	0					
9/09/68	5050	32.31	5.1	94	7.9	41152	885	1069	10450	180	0	187	7947	14900	0.0	3.4	9.40	--	37270	6609
1315	5050	--	--	--	8.3	--	44.16	87.91	454.57	4.60	0.00	3.06	165.46	420.18	0.00				35536	6456
							7	15	77	1	0	0	28	71	0					

TABLE D-2
MINERAL ANALYSES OF SURFACE WATER

DATE TIME	LAB SAMPLER	GH Q	DO SAT	TEMP	LABORATORY FIELD PH EC	MINERAL CONSTITUENTS IN				MILLIGRAMS PER LITER			MILLIEQUIVALENTS PER LITER			MILLIGRAMS PER LITER			TDS SUM	T MCL
						CA	MG	NA	K	CO3	HCO3	S04	CL	NO3	F	B	SI02			
STATION NUMBER W71695.00 COLORADO RIVER BELOW YUMA MAIN CANAL WASTEWAY																				
11/02/67	5050	10.26	9.6	69	8.0	1462	105	34	168	5	0	200	372	158	1.0	0.6	0.22	--	975	402
1100	5050	646	106	--	--	--	5.24	2.80	7.31	0.13	0.00	3.28	7.74	4.45	0.02				943	230
							34	18	47	1	0	21	50	29	0					
01/24/68	5050	10.10	9.3	58	7.8	1930	125	46	223	5	0	229	418	271	1.5	0.8	0.22	--	1252	502
0930	5050	560	90	--	8.0	--	6.24	3.78	9.70	0.13	0.00	3.75	8.70	7.64	0.02				1204	310
							31	19	49	1	0	19	43	38	0					
03/06/68	5050	10.05	8.0	66	8.0	1957	129	46	229	5	0	226	407	277	1.0	0.6	0.25	--	1252	510
0900	5050	520	86	--	--	--	6.44	3.78	9.96	0.13	0.00	3.70	8.47	7.81	0.02				1206	320
							32	19	49	1	0	18	42	39	0					
05/07/68	5050	10.89	9.0	72	8.3	1400	98	36	153	6	0	179	358	136	2.0	0.4	0.20	--	883	390
0835	5050	1010	102	--	--	--	4.89	2.96	6.65	0.15	0.00	2.93	7.45	3.83	0.03				878	240
							33	20	45	1	0	21	52	27	0					
09/09/68	5050	10.22	6.2	80	7.8	1797	122	45	216	6	0	220	409	256	1.2	0.7	0.26	--	1223	490
0835	5050	618	76	--	8.0	--	6.09	3.70	9.48	0.15	0.00	3.60	8.51	7.22	0.02				1167	300
							31	19	49	1	0	19	44	37	0					
STATION NUMBER W71750.00 COLORADO RIVER BELOW MORELOS DAM																				
11/02/67	5050	11.15	8.4	70	7.8	6757	290	123	1100	10	0	351	993	1640	12.0	2.0	1.70	--	4320	1230
1145	5050	310	94	--	--	--	14.47	10.11	47.85	0.25	0.00	5.75	20.67	46.25	0.19				4345	940
							20	14	66	0	0	8	28	63	0					
01/24/68	5050	9.64	8.2	64	7.5	7782	307	144	1260	12	0	332	1074	1944	10.5	2.9	2.00	--	5165	1350
0854	5050	204	85	--	8.1	--	15.32	11.84	54.81	0.31	0.00	5.44	22.36	54.82	0.17				4920	1080
							19	14	67	0	0	7	27	66	0					
03/06/68	5050	8.23	7.2	67	7.7	6309	277	177	935	11	0	364	911	1429	8.4	2.0	1.40	--	4017	1420
0800	5050	53.0	78	--	--	--	13.82	14.56	40.67	0.28	0.00	5.96	18.97	40.30	0.13				3931	1120
							20	21	59	0	0	9	29	62	0					
05/08/68	5050	8.65	8.0	73	8.1	5310	226	99	752	9	0	330	848	1040	8.0	1.8	1.40	--	3350	970
0745	5050	150	92	--	--	--	11.28	8.14	32.71	0.23	0.00	5.41	17.65	29.33	0.13				3148	700
							21	15	62	0	0	10	34	56	0					
07/01/68	5056	--	--	--	7.9	3900	170	80	559	8	0	208	666	789	--	--	--	--	2470	750
--	5056	--	--	--	--	--	8.48	6.58	24.32	0.20	0.00	3.41	13.87	22.25	--				2375	580
							21	17	61	0	0	9	35	56						
07/15/68	5056	--	--	--	8.0	5010	208	97	768	9	0	249	805	1100	--	--	--	--	3210	910
--	5056	--	--	--	--	--	10.38	7.98	33.41	0.23	0.00	4.08	16.76	31.02	--				3110	710
							20	15	64	0	0	8	32	60						
07/22/68	5056	--	--	--	8.0	5310	214	102	830	9	0	250	840	1180	--	--	--	--	3470	950
--	5056	--	--	--	--	--	10.68	8.39	36.10	0.23	0.00	4.10	17.49	33.27	--				3298	740
							19	15	65	0	0	7	32	61						
07/29/68	5056	--	--	--	8.1	4270	175	86	649	8	0	213	725	898	--	--	--	--	2770	790
--	5056	--	--	--	--	--	8.73	7.07	28.23	0.20	0.00	3.49	15.09	25.32	--				2646	610
							20	16	64	0	0	8	34	58						
08/05/68	5056	--	--	--	7.5	3750	180	76	531	8	0	244	644	766	--	--	--	--	2460	760
--	5056	--	--	--	--	--	8.98	6.25	23.10	0.20	0.00	4.00	13.41	21.60	--				2325	560
							23	16	60	0	0	10	34	55						
08/26/68	5056	--	--	--	7.4	4940	204	97	744	9	0	232	814	1090	--	--	--	--	3210	900
--	5056	--	--	--	--	--	10.18	7.98	32.36	0.23	0.00	3.80	16.95	30.74	--				3073	710
							20	16	64	0	0	7	33	60						
09/03/68	5056	--	--	--	7.8	5410	217	102	826	9	0	240	852	1220	--	--	--	--	3520	960
--	5056	--	--	--	--	--	10.83	8.39	35.93	0.23	0.00	3.93	17.74	34.40	--				3344	760
							19	15	65	0	0	7	32	61						
09/09/68	5056	--	--	--	7.8	5160	207	100	775	9	0	242	827	1140	--	--	--	--	3330	920
--	5056	--	--	--	--	--	10.33	8.22	33.71	0.23	0.00	3.97	17.22	32.15	--				3177	730
							20	16	64	0	0	7	32	60						
09/16/68	5056	--	--	--	7.7	4870	212	94	711	9	0	279	813	1020	--	--	--	--	3140	910
--	5056	--	--	--	--	--	10.58	7.73	30.93	0.23	0.00	4.57	16.93	28.76	--				2997	680
							21	16	62	0	0	9	34	57						
09/24/68	5056	--	--	--	7.7	6810	265	123	1080	10	0	305	1000	1620	--	--	--	--	4470	1160
--	5056	--	--	--	--	--	13.22	10.11	46.98	0.25	0.00	5.00	20.82	45.68	--				4248	910
							19	14	67	0	0	7	29	64						
09/30/68	5056	--	--	--	7.7	6830	264	124	1080	10	0	298	998	1640	--	--	--	--	4490	1160
--	5056	--	--	--	--	--	13.17	10.20	46.98	0.25	0.00	4.88	20.78	46.25	--				4263	920
							19	14	66	0	0	7	29	64						
STATION NUMBER W71870.05 COLORADO RIVER NEAR BLYTHE																				
07/09/68	5056	--	--	--	7.4	1210	90	32	116	5	0	167	318	104	--	--	--	--	802	350
--	5056	--	--	--	--	--	4.49	2.63	5.04	0.13	0.00	2.74	6.62	2.93	--				748	210
							36	21	41	1	0	22	54	24						
07/15/68	5050	--	8.0	79	8.1	1116	84	31	111	5	0	379	306	98	1.8	0.6	0.12	--	801	310
1430	5050	--	98	--	--	--	4.19	2.55	4.83	0.13	0.00	6.21	6.37	2.76	0.03				824	210
							36	22	41	1	0	40	41	18	0					

TABLE D-2
MINERAL ANALYSES OF SURFACE WATER

DATE TIME	LAB SAMPLER	GH Q	DO SAT	TEMP	LABORATORY FIELD	MINERAL CONSTITUENTS IN				MILLIGRAMS PER MILLIEQUIVALENTS PER PERCENT			LITER LITER VALUE		MILLIGRAMS PER			LITER		
						PH	EC	CA	MG	NA	K	CO3	HC03	SO4	CL	NO3	F	B	SI02	TDS SUM
STATION NUMBER W71870.05						COLORADO RIVER NEAR BLYTHE														
7/23/68	5056	--	--	--	7.4	1130	85	31	110	5	0	155	308	97	--	--	--	--	750	340
--	5056	--	--	--	--	--	4.24	2.55	4.78	0.13	0.00	2.54	6.41	2.73	--	--	--	--	713	213
							36	22	41	1	0	22	55	23						
8/06/68	5056	--	--	--	7.9	1140	85	30	112	5	0	155	310	97	--	--	--	--	750	336
--	5056	--	--	--	--	--	4.24	2.47	4.87	0.13	0.00	2.54	6.45	2.73	--	--	--	--	716	209
							36	21	42	1	0	22	55	23						
8/20/68	5056	--	--	--	8.5	1160	80	32	118	5	0	137	332	105	--	--	--	--	770	331
--	5056	--	--	--	--	--	3.99	2.63	5.13	0.13	0.00	2.24	6.91	2.96	--	--	--	--	740	219
							34	22	43	1	0	18	57	24						
9/03/68	5056	--	--	--	7.9	1140	85	31	115	5	0	156	313	98	--	--	--	--	761	340
--	5056	--	--	--	--	--	4.24	2.55	5.00	0.13	0.00	2.56	6.52	2.76	--	--	--	--	724	212
							36	21	42	1	0	22	55	23						
9/10/68	5050	--	7.1	80	8.1	1152	86	33	116	5	0	156	320	107	1.5	0.5	0.16	--	762	350
0915	5050	8000 E	87	80	8.1	--	4.29	2.71	5.04	0.13	0.00	2.56	6.66	3.02	0.02	--	--	--	746	223
							35	22	41	1	0	21	54	25	0					
9/17/68	5056	--	--	--	7.9	1200	89	33	118	5	0	165	313	104	--	--	--	--	795	358
--	5056	--	--	--	--	--	4.44	2.71	5.13	0.13	0.00	2.70	6.52	2.93	--	--	--	--	744	223
							36	22	41	1	0	22	54	24						
STATION NUMBER W71929.00						ALL AMERICAN CANAL ABOVE PILOT KNOB WASTEWAY														
1/02/67	5050	17.17	8.8	68	8.0	1353	96	31	154	5	0	183	351	140	1.0	0.6	0.22	--	900	367
104A	5050	3970	96	--	--	--	4.79	2.55	6.70	0.13	0.00	3.00	7.31	3.95	0.02	--	--	--	869	217
							34	18	47	1	0	21	51	28	0					
1/24/68	5050	17.18	10.8	54	7.8	1257	89	32	133	5	0	166	317	122	2.0	0.5	0.14	--	834	354
101A	5050	4433	100	54	8.3	--	4.44	2.63	5.78	0.13	0.00	2.72	6.60	3.44	0.03	--	--	--	783	218
							34	20	44	1	0	21	52	27	0					
3/05/68	5050	17.34	9.7	67	8.0	1261	89	31	133	5	0	168	320	121	2.3	0.6	0.10	--	818	350
1035	5050	6395	105	67	--	--	4.44	2.55	5.78	0.13	0.00	2.75	6.66	3.41	0.04	--	--	--	785	212
							34	20	45	1	0	21	52	26	0					
5/07/68	5050	17.36	8.5	71	8.4	1360	94	33	138	6	4	166	337	128	1.8	0.4	0.10	--	834	370
0815	5050	5246	96	71	--	--	4.69	2.71	6.00	0.15	0.13	2.72	7.02	3.61	0.03	--	--	--	824	228
							35	20	44	1	1	20	52	27	0					
9/09/68	5050	17.22	6.7	83	8.1	1306	90	32	147	5	0	167	344	137	1.4	0.6	0.19	--	868	356
0935	5050	6453	85	83	8.1	--	4.49	2.63	6.39	0.13	0.00	2.74	7.16	3.86	0.02	--	--	--	840	219
							33	19	47	1	0	20	52	28	0					
STATION NUMBER W91100.00						NEW RIVER NEAR WESTMORLAND														
1/03/67	5050	2.80	7.1	62	7.5	5650	235	108	900	25	0	271	827	1360	20.0	0.8	1.00	--	3730	1031
080A	5050	526	72	--	--	--	11.73	8.88	39.15	0.64	0.00	4.44	17.22	38.35	0.32	--	--	--	3610	809
							19	15	65	1	0	7	28	64	0					
1/23/68	5050	2.80	8.0	56	7.5	5618	220	108	872	30	0	251	755	1338	29.5	1.1	1.20	--	3613	994
113A	5050	498	76	56	7.8	--	10.93	8.88	37.93	0.77	0.00	4.11	15.72	37.73	0.47	--	--	--	3479	788
							19	15	65	1	0	7	27	65	1					
3/04/68	5050	3.32	6.6	70	7.5	5851	229	109	888	32	0	268	788	1333	17.0	0.8	1.05	--	3660	1020
142A	5050	588	74	70	--	--	11.43	8.96	38.63	0.82	0.00	4.39	16.41	37.59	0.27	--	--	--	3530	801
							19	15	64	1	0	7	28	64	0					
5/06/68	5050	3.75	6.4	74	8.0	5710	217	114	800	30	0	264	805	1230	17.0	0.6	1.30	--	3580	1011
1515	5050	679	74	74	--	--	10.83	9.37	34.80	0.77	0.00	4.33	16.76	34.68	0.27	--	--	--	3345	794
							19	17	62	1	0	8	30	62	0					
9/09/68	5050	3.40	5.2	85	7.5	4871	210	98	740	26	0	251	781	1113	15.0	0.9	1.20	--	3246	928
111A	5050	564	67	85	8.1	--	10.48	8.06	32.19	0.66	0.00	4.11	16.26	31.39	0.24	--	--	--	3109	722
							20	16	63	1	0	8	31	60	0					
STATION NUMBER W91800.00						NEW RIVER AT INTERNATIONAL BOUNDARY														
1/02/67	5050	8.50	--	69	7.3	6536	218	109	1035	66	0	276	654	1710	5.0	0.8	1.50	--	4160	993
090A	5050	132	--	--	--	--	10.88	8.96	45.02	1.69	0.00	4.52	13.62	48.22	0.08	--	--	--	3935	766
							16	13	68	2	0	7	20	73	0					
1/23/68	5050	8.88	10.0	62	7.4	6892	231	106	1125	77	0	266	645	1848	16.5	1.1	1.55	--	4350	1013
1410	5050	170	102	62	8.2	--	11.53	8.72	48.94	1.97	0.00	4.36	13.43	52.11	0.27	--	--	--	4182	795
							16	12	69	3	0	6	19	74	0					
3/05/68	5050	8.80	9.6	67	7.2	8183	267	124	1308	93	0	271	728	2222	11.6	0.8	1.70	--	5150	1177
0815	5050	160	104	67	8.0	--	13.32	10.20	56.90	2.38	0.00	4.44	15.16	62.66	0.19	--	--	--	4890	955
							16	12	69	3	0	5	18	76	0					
5/07/68	5050	--	--	71	7.9	8810	257	136	1330	108	0	288	802	2250	6.4	0.7	2.40	--	5350	1201
0645	5050	184	--	--	--	--	12.82	11.18	57.85	2.76	0.00	4.72	16.70	63.45	0.10	--	--	--	5035	965
							15	13	68	3	0	5	20	75	0					
9/08/68	5050	--	--	91	7.1	6293	220	105	1000	66	0	246	759	1580	5.5	0.9	1.60	--	4012	981
1305	5050	146	--	--	7.9	--	10.98	8.63	43.50	1.69	0.00	4.03	15.80	44.55	0.09	--	--	--	3859	780
							17	13	67	3	0	6	24	69	0					

TABLE D-2

MINERAL ANALYSES OF SURFACE WATER

DATE TIME	LAB SAMPLER	GH Q	DO SAT	TEMP	LABORATORY FIELD	EC	MINERAL CONSTITUENTS IN				MILLIGRAMS PER LITER			MILLIGRAMS PER LITER			F	8	SI02	LITER TDS SUM	NO
							CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3						
STATION NUMBER W92020.00 ALAMO RIVER AT INTERNATIONAL BOUNDARY																					
11/02/67	5050	0.35	9.4	63	7.8	3290	171	73	475	8	0	288	664	595	7.4	0.7	1.20	--	2180	7	
093n	5050	2.8	97	--	--	--	8.53	6.00	20.66	0.20	0.00	4.72	13.82	16.78	0.12				2137	4	
							24	17	58	1	0	13	39	47	0						
01/23/68	5050	0.30	11.0	57	8.0	4602	209	115	690	10	0	323	905	889	4.0	1.1	1.14	--	3132	9	
152n	5050	2.2	106	--	8.0	--	10.43	9.46	30.01	0.25	0.00	5.29	18.84	25.07	0.06				2984	7	
							21	19	60	0	0	11	38	51	0						
03/05/68	5050	0.30	8.6	62	7.7	4684	205	115	680	11	0	325	957	874	4.4	1.1	1.08	--	3169	9	
091n	5050	2.2	88	--	--	--	10.23	9.46	29.58	0.28	0.00	5.33	19.92	24.65	0.07				3009	7	
							21	19	60	1	0	11	40	49	0						
05/07/68	5050	0.30	6.6	67	8.4	3390	160	78	442	7	4	266	662	548	2.2	0.6	0.90	--	2210	7	
0715	5050	2.2	71	--	--	--	7.98	6.41	19.23	0.18	0.13	4.36	13.78	15.45	0.03				2036	4	
							24	19	57	0	0	13	41	46	0						
09/08/68	5050	0.28	5.4	83	7.6	2762	139	69	380	8	0	246	577	483	1.8	0.9	0.80	--	1852	6	
1355	5050	2.0	69	--	7.9	--	6.94	5.67	16.53	0.20	0.00	4.03	12.01	13.62	0.03				1781	4	
							24	19	56	1	0	14	40	46	0						
STATION NUMBER W92100.00 ALAMO RIVER NEAR CALIPATRIA																					
11/03/67	5050	9.71	8.6	63	7.5	3953	205	104	563	11	0	239	917	710	30.0	0.9	0.68	--	2740	9	
082n	5050	9.08	89	--	--	--	10.23	8.55	24.49	0.28	0.00	3.92	19.09	20.02	0.48				2660	7	
							23	20	56	1	0	9	44	46	1						
01/23/68	5050	9.44	10.0	54	7.1	4090	203	112	558	11	0	212	857	778	56.0	0.8	0.56	--	2792	9	
101n	5050	6.81	93	--	8.2	--	10.13	9.21	24.27	0.28	0.00	3.47	17.84	21.94	0.90				2681	7	
							23	21	55	1	0	8	40	50	2						
03/04/68	5050	9.10	8.1	69	7.4	3899	258	63	505	12	0	217	820	689	30.8	0.8	0.44	--	2565	9	
133n	5050	10.17	89	--	--	--	12.87	5.18	21.97	0.31	0.00	3.56	17.07	19.43	0.50				2486	7	
							32	13	54	1	0	9	42	48	1						
05/06/68	5050	9.08	7.9	73	8.0	4100	188	110	500	11	0	228	840	693	27.0	0.5	0.60	--	1350	9	
145n	5050	9.08	91	--	--	--	9.38	9.05	21.75	0.28	0.00	3.74	17.49	19.54	0.43				2483	7	
							23	22	54	1	0	9	42	47	1						
09/09/68	5050	9.12	6.1	85	7.6	3451	178	92	480	12	0	214	809	600	20.0	0.9	0.60	--	2391	8	
1145	5050	9.70	79	--	8.1	--	8.88	7.57	20.88	0.31	0.00	3.51	16.84	16.92	0.32				2298	6	
							24	20	55	1	0	9	45	45	1						
STATION NUMBER Y11550.00 SANTA ANA RIVER BELOW PRADO DAM																					
10/05/67	5050	2.21	7.7	72	7.5	1218	103	27	120	7	0	310	134	152	35.0	1.0	0.46	--	800	3	
135n	5050	60.0	87	--	7.3	--	5.14	2.22	5.22	0.18	0.00	5.08	2.79	4.29	0.56				732	1	
							40	17	41	1	0	40	22	34	4						
11/09/67	5050	2.27	8.3	69	7.5	1221	103	27	118	8	0	312	142	141	32.0	1.3	0.65	--	770	3	
1905	5050	50.0	91	--	7.4	--	5.14	2.22	5.13	0.20	0.00	5.11	2.96	3.98	0.52				727	1	
							40	17	40	2	0	41	23	32	4						
11/30/67	5100	--	--	--	7.9	1286	116	28	121	4	0	332	150	151	37.0	0.8	0.43	--	835	4	
--	5100	--	--	--	--	--	5.79	2.30	5.26	0.10	0.00	5.44	3.12	4.26	0.60				772	1	
							43	17	39	1	0	40	23	32	4						
12/14/67	5050	2.14	10.0	48	7.2	1326	109	30	118	9	0	320	151	153	39.0	1.0	0.36	--	820	3	
160n	5050	49.0	86	--	8.0	--	5.44	2.47	5.13	0.23	0.00	5.24	3.14	4.31	0.63				768	1	
							41	19	39	2	0	39	24	32	5						
01/09/68	5050	16.01	8.8	54	7.1	1297	107	31	117	9	0	342	142	156	8.1	0.8	0.52	--	774	3	
120n	5050	67.0	82	--	--	--	5.34	2.55	5.09	0.23	0.00	5.60	2.96	4.40	0.13				740	1	
							40	19	38	2	0	43	23	34	1						
02/08/68	5050	13.21	9.0	54	7.2	1272	105	30	118	8	0	323	143	145	36.0	0.8	0.46	--	818	3	
1015	5050	58.0	83	--	--	--	5.24	2.47	5.13	0.20	0.00	5.29	2.98	4.09	0.58				746	1	
							40	19	39	2	0	41	23	32	4						
03/13/68	5050	14.68	8.8	53	7.3	1427	121	34	130	17	0	354	184	157	32.2	1.1	0.42	--	905	4	
0735	5050	103	81	--	--	--	6.04	2.80	5.65	0.43	0.00	5.80	3.83	4.43	0.52				851	1	
							40	19	38	3	0	40	26	30	4						
04/03/68	5050	15.18	8.3	64	7.6	1180	98	27	108	12	0	295	137	132	27.3	0.8	0.30	--	740	3	
110n	5050	99.0	86	--	--	--	4.89	2.22	4.70	0.31	0.00	4.83	2.85	3.72	0.44				688	1	
							40	18	39	2	0	41	24	31	4						
05/02/68	5050	2.10	7.8	68	8.4	1300	104	30	117	7	8	308	134	147	35.0	0.7	0.40	--	780	3	
121n	5050	44.0	85	--	--	--	5.19	2.47	5.09	0.18	0.27	5.05	2.79	4.14	0.56				735	1	
							40	19	39	1	2	39	22	32	4						
05/21/68	5100	--	--	--	7.6	1311	117	25	122	7	0	322	134	163	24.0	0.9	0.47	--	850	3	
--	5100	--	--	--	--	--	5.84	2.05	5.31	0.18	0.00	5.28	2.79	4.60	0.39				752	1	
							44	15	40	1	0	40	21	35	3						
07/25/68	5050	2.00	8.2	79	8.2	1287	113	29	121	5	0	340	145	149	24.0	0.9	0.50	--	788	4	
1145	5050	29.0	100	--	8.2	--	5.64	2.38	5.26	0.13	0.00	5.57	3.02	4.20	0.39				755	1	
							42	18	39	1	0	42	23	32	3						
08/15/68	5050	1.98	8.0	86	7.7	1240	106	30	127	6	0	328	144	160	26.0	0.9	0.45	--	747	3	
140n	5050	33.0	105	--	8.2	--	5.29	2.47	5.52	0.15	0.00	5.37	3.00	4.51	0.42				762	1	
							39	18	41	1	0	40	22	34	3						

TABLE D-2
MINERAL ANALYSES OF SURFACE WATER

DATE TIME	LAB SAMPLER	GH Q	DO SAT	TEMP	LABORATORY FIELD PH EC	MINERAL CONSTITUENTS IN				MILLIGRAMS PER MILLIEQUIVALENTS PER PERCENT			LITER PER LITER VALUE		MILLIGRAMS PER LITER			LITER TH		
						CA	MG	NA	K	CO3	HC03	504	CL	NO3	F	B	5102	SUM	NCH	
STATION NUMBER Y11550.00						SANTA ANA RIVER BELOW PRADO DAM														
3/17/68	5050	2.01	7.1	78	7.7	1225	103	29	106	7	0	319	137	148	24.6	0.9	0.59	--	765	376
141a	5050	31.0	85		8.1	--	5.14	2.38	4.61	0.18	0.00	5.23	2.85	4.17	0.40				713	115
							42	19	37	1	0	41	22	33	3					
STATION NUMBER Y21210.05						CHINO CREEK NEAR CHINO														
1/05/67	5050	--	6.1	74	7.0	821	46	17	94	17	0	271	62	72	25.0	0.6	0.46	--	580	185
1320	5050	1.0	71		--	--	2.29	1.40	4.09	0.43	0.00	4.44	1.29	2.03	0.40				468	0
							28	17	50	5	0	54	16	25	5					
1/09/67	5050	--	7.6	70	7.4	962	41	21	97	17	0	351	63	72	25.0	0.7	0.60	--	530	189
1930	5050	--	85		--	--	2.04	1.73	4.22	0.43	0.00	5.75	1.31	2.03	0.40				510#	0
							24	20	50	5	0	61	14	21	4					
2/14/67	5050	--	--	40	7.4	729	55	22	54	17	0	237	74	46	27.0	0.8	0.16	--	461	228
1645	5050	6.0	--		7.5	--	2.74	1.81	2.35	0.43	0.00	3.88	1.54	1.30	0.43				413	33
							37	25	32	6	0	54	21	18	6					
1/09/68	5050	--	7.8	49	7.2	807	52	18	60	29	0	212	59	74	51.3	0.8	0.14	--	472	204
1230	5050	1.0	68		--	--	2.59	1.48	2.61	0.74	0.00	3.47	1.23	2.09	0.83				449	30
							35	20	35	10	0	46	16	27	11					
2/08/68	5050	--	7.6	53	7.3	744	58	19	59	23	0	264	57	41	42.2	0.7	0.12	--	482	223
1045	5050	2.0	70		--	--	2.89	1.56	2.57	0.59	0.00	4.33	1.19	1.16	0.68				430	6
							38	20	34	8	0	59	16	16	9					
3/13/68	5050	--	7.7	52	7.8	984	87	27	67	27	0	364	111	55	15.5	1.1	0.15	--	636	328
071a	5050	2.0	70		--	--	4.34	2.22	2.91	0.69	0.00	5.96	2.31	1.55	0.25				570	30
							43	22	29	7	0	59	23	15	2					
4/03/68	5050	--	7.1	64	7.7	684	69	17	40	18	0	234	77	36	30.4	0.6	0.08	--	444	242
1125	5050	1.0	74		--	--	3.44	1.40	1.74	0.46	0.00	3.83	1.60	1.01	0.49				404	50
							49	20	25	6	0	55	23	15	7					
5/02/68	5050	--	7.3	68	8.4	1110	95	22	102	11	2	201	238	94	8.6	0.4	0.10	--	709	328
123a	5050	1.0	80		--	--	4.74	1.81	4.44	0.28	0.07	3.29	4.95	2.65	0.14				672	160
							42	16	39	2	1	30	45	24	1					
7/25/68	5050	--	7.1	84	7.5	723	55	18	66	15	0	240	65	63	19.8	0.8	0.39	--	489	211
1515	5050	1.0	91		8.2	--	2.74	1.48	2.87	0.38	0.00	3.93	1.35	1.78	0.32				421	15
							37	20	38	5	0	53	18	24	4					
STATION NUMBER Y41100.00						WARM CREEK NEAR COLTON														
1/05/67	5050	--	8.7	82	7.4	911	54	18	100	12	0	207	68	112	67.0	0.8	0.46	--	595	209
104a	5050	6.0	109		7.1	--	2.69	1.48	4.35	0.31	0.00	3.39	1.41	3.16	1.08				534	39
							30	17	49	3	0	37	16	35	12					
1/09/67	5050	--	7.0	72	7.4	960	47	20	110	13	0	224	71	108	69.0	1.3	0.56	--	610	200
1645	5050	5.0	79		7.0	--	2.34	1.64	4.78	0.33	0.00	3.67	1.48	3.04	1.11				550	16
							26	18	52	4	0	39	16	33	12					
2/14/67	5050	--	10.0	59	7.3	1100	45	23	129	13	0	214	85	149	55.8	1.4	0.46	--	681	207
110a	5050	15.0	98		7.3	--	2.24	1.89	5.61	0.33	0.00	3.51	1.77	4.20	0.90				607	31
							22	19	56	3	0	34	17	40	9					
1/09/68	5050	--	8.1	65	7.1	1098	40	27	130	13	0	294	80	148	8.0	1.0	0.52	--	639	211
1000	5050	5.0	85		7.1	--	1.99	2.22	5.65	0.33	0.00	4.82	1.66	4.17	0.13				593#	0
							20	22	55	3	0	45	15	39	1					
2/08/68	5050	--	9.9	58	7.1	1393	55	27	174	14	0	171	87	231	87.3	1.2	0.44	--	842	248
0815	5050	3.0	96		7.1	--	2.74	2.22	7.57	0.36	0.00	2.80	1.81	6.51	1.41				761	108
							21	17	59	3	0	22	14	52	11					
3/13/68	5050	--	9.3	65	7.3	1059	61	19	109	13	0	247	79	120	60.2	1.5	0.33	--	647	230
142a	5050	5.0	98		7.1	--	3.04	1.56	4.74	0.33	0.00	4.05	1.64	3.38	0.97				585	28
							31	16	49	3	0	40	16	34	10					
4/03/68	5050	--	9.1	62	7.4	1127	52	17	128	13	0	146	70	169	78.1	1.1	0.42	--	691	200
070a	5050	2.0	93		7.2	--	2.59	1.40	5.57	0.33	0.00	2.39	1.46	4.76	1.26				601	80
							26	14	56	3	0	24	15	48	13					
5/02/68	5050	--	8.8	71	7.4	1200	44	27	130	13	0	214	79	162	28.0	0.9	0.60	--	679	221
1115	5050	4.0	99		7.1	--	2.19	2.22	5.65	0.33	0.00	3.51	1.64	4.57	0.45				590	45
							21	21	54	3	0	34	16	45	4					
5/17/68	5050	--	8.1	82	7.3	1068	49	24	117	13	0	232	70	137	62.0	1.4	0.26	--	665	221
1445	5050	8.0	102		7.1	--	2.44	1.97	5.09	0.33	0.00	3.80	1.46	3.86	2				588	31
							25	20	52	3	0	38	14	38	10					
7/25/68	5050	--	12.5	82	7.7	1090	57	18	136	7	0	239	82	165	27.0	1.0	0.52	--	634	216
083a	5050	4.0	157		7.9	--	2.84	1.48	5.91	0.18	0.00	3.92	1.71	4.65	0.43				611	20
							27	14	57	2	0	37	16	43	4					
STATION NUMBER Y51080.00						SANTA ANA RIVER AT COLTON														
1/05/67	5050	--	8.2	82	7.4	936	59	14	100	12	0	215	71	112	60.0	0.9	0.46	--	590	205
110a	5050	2.5	103		--	--	2.94	1.15	4.35	0.31	0.00	3.52	1.48	3.16	0.97				536	29
							34	13	50	3	0	39	16	35	11					
1/09/67	5050	--	7.3	71	7.5	948	47	20	108	13	0	229	72	106	64.0	1.3	0.48	--	600	200
1700	5050	30.0	82		--	--	2.34	1.64	4.70	0.33	0.00	3.75	1.50	2.99	1.03				545	12
							26	18	52	4	0	40	16	32	11					

TABLE D-2
MINERAL ANALYSES OF SURFACE WATER

DATE TIME	LAB SAMPLER	GH O	DO SAT	TEMP	LABORATORY FIELD PH EC	MINERAL CONSTITUENTS IN				MILLIGRAMS PER MILLIEQUIVALENTS PER CENT			LITER PER LITER VALUE		MILLIGRAMS PER LITER			LITER TDS SUM	
						CA	MG	NA	K	CO3	HCO3	S04	CL	NO3	F	B	SI02		
STATION NUMBER Y51080.00						SANTA ANA RIVER AT COLTON													
12/14/67	5050	--	10.0	59	7.3	1059	43	23	122	13	0	220	83	139	52.1	1.3	0.44	--	648
123A	5050	60.0	98	--	7.5	--	2.14	1.89	5.31	0.33	0.00	3.60	1.73	3.92	0.84				585
							22	19	55	3	0	36	17	39	8				
01/09/68	5050	--	9.3	63	7.2	1081	35	28	119	14	0	304	82	129	11.0	1.2	0.52	--	602
1010	5050	40.0	96	--	--	--	1.75	2.30	5.18	0.36	0.00	4.98	1.71	3.64	0.18				570#
							18	24	54	4	0	47	16	35	2				
02/08/68	5050	--	10.1	59	7.6	1370	50	27	166	14	0	223	89	211	62.6	1.3	0.46	--	815
083A	5050	15.0	99	--	--	--	2.49	2.22	7.22	0.36	0.00	3.65	1.85	5.95	1.01				731
							20	18	59	3	0	29	15	48	8				
03/13/68	5050	--	9.3	64	7.6	1064	54	23	112	13	0	253	80	120	55.8	1.1	0.33	--	634
1435	5050	15.0	97	--	--	--	2.69	1.89	4.87	0.33	0.00	4.15	1.66	3.38	0.90				584
							27	19	50	3	0	41	16	33	9				
04/03/68	5050	--	9.6	57	7.1	1083	49	21	125	13	0	149	68	158	83.7	1.3	0.45	--	656
065A	5050	4.0	92	--	--	--	2.44	1.73	5.44	0.33	0.00	2.44	1.41	4.45	1.35				593
							25	17	55	3	0	25	15	46	14				
05/02/68	5050	--	8.1	71	7.6	1200	46	25	130	13	0	199	76	159	32.0	0.9	0.60	--	696
1030	5050	15.0	91	--	--	--	2.29	2.05	5.65	0.33	0.00	3.26	1.58	4.48	0.52				581
							22	20	55	3	0	33	16	45	5				
06/17/68	5050	--	8.3	85	7.4	935	45	23	93	12	0	231	66	101	54.6	1.2	0.26	--	586
1430	5050	20.0	108	--	--	--	2.24	1.89	4.04	0.31	0.00	3.79	1.37	2.85	0.88				510
							26	22	48	4	0	43	15	32	10				
07/25/68	5050	--	10.1	84	7.1	1061	32	31	121	13	0	233	80	136	35.3	1.4	0.61	--	630
090A	5050	15.0	129	--	8.0	--	1.60	2.55	5.26	0.33	0.00	3.82	1.66	3.83	0.57				565
							16	26	54	3	0	39	17	39	6				
08/15/68	5050	--	8.7	87	7.3	1018	39	27	121	10	0	264	76	124	24.0	1.2	0.48	--	571
113A	5050	25.0	115	--	7.8	--	1.95	2.22	5.26	0.25	0.00	4.33	1.58	3.50	0.39				553
							20	23	54	3	0	44	16	36	4				
09/17/68	5050	--	8.7	87	7.3	1018	33	29	110	17	0	295	82	115	16.5	1.2	0.58	--	584
111A	5050	30.0	115	--	7.7	--	1.65	2.38	4.78	0.43	0.00	4.83	1.71	3.24	0.27				550#
							18	26	52	5	0	48	17	32	3				
STATION NUMBER Y51978.00						SANTA ANA RIVER NO. 1 TAILRACE NEAR MENTONE													
10/05/67	5050	--	10.1	56	7.9	201	21	6	12	2	0	107	11	4	0.5	0.3	0.00	--	145
0925	5050	50.0	96	--	--	--	1.05	0.49	0.52	0.05	0.00	1.75	0.23	0.11	0.01				110
							50	23	25	2	0	83	11	5	0				
11/09/67	5050	--	9.9	58	7.9	207	25	3	13	2	0	107	11	4	0.0	0.4	0.02	--	135
1610	5050	50.0	96	--	--	--	1.25	0.25	0.56	0.05	0.00	1.75	0.23	0.11	0.00				111
							59	12	27	2	0	84	11	5	0				
12/14/67	5050	--	13.0	37	7.8	222	21	7	14	2	0	117	13	5	0.0	0.4	0.02	--	137
0930	5050	35.0	96	--	8.1	--	1.05	0.57	0.61	0.05	0.00	1.92	0.27	0.14	0.00				120
							46	25	27	2	0	82	12	6	0				
01/09/68	5050	--	11.8	45	7.8	212	21	7	13	2	0	110	12	4	0.0	0.4	0.03	--	129
0900	5050	70.0	97	--	--	--	1.05	0.57	0.56	0.05	0.00	1.80	0.25	0.11	0.00				114
							47	26	25	2	0	83	11	5	0				
02/08/68	5050	--	11.6	46	7.8	221	24	5	13	2	0	112	12	4	0.0	0.4	0.00	--	141
0720	5050	80.0	97	--	--	--	1.20	0.41	0.56	0.05	0.00	1.83	0.25	0.11	0.00				116
							54	18	25	2	0	83	11	5	0				
03/13/68	5050	--	11.3	47	8.1	206	23	4	12	2	0	105	10	4	0.5	0.4	0.00	--	135
1345	5050	80.0	96	--	--	--	1.15	0.33	0.52	0.05	0.00	1.72	0.21	0.11	0.01				108
							56	16	25	2	0	84	10	5	0				
04/03/68	5050	--	11.6	44	8.0	206	22	5	12	1	0	103	12	4	0.0	0.4	0.00	--	138
0735	5050	80.0	94	--	--	--	1.10	0.41	0.52	0.02	0.00	1.69	0.25	0.11	0.00				107
							53	20	25	1	0	82	12	5	0				
05/01/68	5050	--	10.8	54	8.1	210	24	5	13	2	0	106	11	4	0.1	0.3	0.00	--	129
1000	5050	80.0	100	--	--	--	1.20	0.41	0.56	0.05	0.00	1.74	0.23	0.11	0.00				112#
							54	18	25	2	0	83	11	5	0				
05/20/68	5100	--	--	--	7.8	202	24	4	13	2	0	107	10	4	0.3	0.4	0.10	--	125
--	5100	--	--	--	--	--	1.20	0.33	0.56	0.05	0.00	1.75	0.21	0.11	0.00				111
							56	15	26	2	0	84	10	5	0				
06/13/68	5050	--	10.2	64	7.5	213	23	4	13	2	0	106	14	4	0.0	0.4	0.00	--	138
1430	5050	80.0	106	--	--	--	1.15	0.33	0.56	0.05	0.00	1.74	0.29	0.11	0.00				113
							55	16	27	2	0	81	14	5	0				
07/24/68	5050	--	9.5	65	8.0	213	25	3	14	1	0	110	11	6	1.5	0.4	0.05	--	101
1500	5050	55.0	100	--	8.1	--	1.25	0.25	0.61	0.02	0.00	1.80	0.23	0.17	0.02				116
							59	12	29	1	0	81	10	8	1				
08/15/68	5050	--	9.1	56	8.1	217	24	5	14	2	0	111	14	8	0.0	0.4	0.02	--	105
0930	5050	22.0	86	--	8.1	--	1.20	0.41	0.61	0.05	0.00	1.82	0.29	0.22	0.00				122
							53	18	27	2	0	78	12	10	0				
09/17/68	5050	--	9.3	57	8.0	228	27	5	14	2	0	117	17	6	0.0	0.4	0.00	--	145
0955	5050	22.0	90	--	8.1	--	1.35	0.41	0.61	0.05	0.00	1.92	0.35	0.17	0.00				129
							56	17	25	2	0	79	14	7	0				

TABLE D-2

MINERAL ANALYSES OF SURFACE WATER

DATE	LAB SAMPLER	GH Q	DO SAT	TEMP	LABORATORY FIELD PH EC	MINERAL CONSTITUENTS IN				MILLIGRAMS PER MILLIEQUIVALENTS PER LITER			LITER PER LITER VALUE		MILLIGRAMS PER LITER			TH NCH		
						CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SI02		TDS SUM	
STATION NUMBER Y61225.00						SANTA ANA RIVER NEAR NORCO														
05/67	5050	--	8.0	83	7.0	1183	89	24	120	8	0	283	109	150	42.0	1.4	0.46	--	735	321
225	5050	50.0	102	--	--	--	4.44	1.97	5.22	0.20	0.00	4.64	2.27	4.23	0.68				683	89
							37	17	44	2	0	39	19	36	6					
09/67	5050	--	8.2	68	7.1	1145	94	22	120	8	0	303	108	141	35.0	1.4	0.65	--	710	325
82n	5050	80.0	89	--	--	--	4.69	1.81	5.22	0.20	0.00	4.97	2.25	3.98	0.56				679	77
							39	15	44	2	0	42	19	34	5					
30/67	5100	--	--	--	8.1	1183	102	22	121	4	0	286	113	155	45.0	0.9	0.38	--	761	345
--	5100	--	--	--	--	--	5.09	1.81	5.26	0.10	0.00	4.69	2.35	4.37	0.72				704	111
							41	15	43	1	0	39	19	36	6					
14/67	5050	--	7.0	49	7.4	1218	93	24	112	9	0	267	127	141	49.0	1.3	0.30	--	801	331
415	5050	70.0	61	8.0	--	--	4.64	1.97	4.87	0.23	0.00	4.38	2.64	3.98	0.79				688	112
							40	17	42	2	0	37	22	34	7					
09/68	5050	--	8.2	63	7.1	1165	89	25	110	9	0	283	122	135	28.5	1.2	0.46	--	685	325
13n	5050	40.0	84	--	--	--	4.44	2.05	4.78	0.23	0.00	4.64	2.54	3.81	0.46				660	93
							39	18	42	2	0	40	22	33	4					
08/68	5050	--	8.3	56	7.3	1166	89	24	111	8	0	268	114	133	45.3	1.0	0.42	--	709	321
95n	5050	50.0	79	--	--	--	4.44	1.97	4.83	0.20	0.00	4.39	2.37	3.75	0.73				658	101
							39	17	42	2	0	39	21	33	6					
13/68	5050	--	8.5	54	7.3	1168	91	24	109	8	0	271	119	131	33.5	1.1	0.48	--	692	326
81n	5050	40.0	79	--	--	--	4.54	1.97	4.74	0.20	0.00	4.44	2.48	3.69	0.54				651	104
							40	17	41	2	0	40	22	33	5					
03/68	5050	--	8.1	69	7.4	1019	83	21	93	8	0	248	103	115	35.3	1.0	0.31	--	632	294
020	5050	60.0	89	--	--	--	4.14	1.73	4.04	0.20	0.00	4.06	2.14	3.24	0.57				582	90
							41	17	40	2	0	41	21	32	6					
02/68	5050	--	8.3	72	8.2	1210	90	26	113	8	0	280	120	142	45.0	0.8	0.30	--	726	332
145	5050	20.0	94	--	--	--	4.49	2.14	4.91	0.20	0.00	4.59	2.50	4.00	0.72				683	102
							38	18	42	2	0	39	21	34	6					
02/68	5100	--	--	--	7.4	1223	101	22	118	8	0	300	112	151	27.0	1.1	0.44	--	761	343
--	5100	--	--	--	--	--	5.04	1.81	5.13	0.20	0.00	4.92	2.33	4.26	0.43				688	97
							41	15	42	2	0	41	19	36	4					
07/68	5050	--	8.3	86	7.5	1283	89	25	114	8	0	292	118	135	35.3	1.3	0.40	--	731	325
32n	5050	20.0	109	--	--	--	4.44	2.05	4.96	0.20	0.00	4.78	2.46	3.81	0.57				670	86
							38	18	42	2	0	41	21	33	5					
025/68	5050	--	5.1	88	7.7	1217	97	23	120	6	0	306	114	150	29.0	1.0	0.56	--	714	337
045	5050	15.0	68	7.9	--	--	4.84	1.89	5.22	0.15	0.00	5.01	2.37	4.23	0.47				691	86
							40	16	43	1	0	41	20	35	4					
STATION NUMBER Y61400.00						SANTA ANA RIVER NEAR ARLINGTON														
05/67	5050	3.39	7.0	82	7.3	1153	73	22	117	9	0	307	97	142	30.0	1.1	0.46	--	680	273
20n	5050	30.0	88	7.3	--	--	3.64	1.81	5.09	0.23	0.00	5.03	2.02	4.00	0.48				643n	21
							34	17	47	2	0	44	17	35	4					
09/67	5050	3.39	8.1	74	7.4	1082	74	25	110	8	0	317	103	120	32.0	1.5	0.58	--	660	288
745	5050	30.0	94	7.1	--	--	3.69	2.05	4.78	0.20	0.00	5.19	2.14	3.38	0.52				630	28
							34	19	45	2	0	46	19	30	5					
130/67	5100	--	--	--	7.5	1158	102	22	107	9	0	273	116	147	31.0	0.8	0.32	--	713	345
--	5100	--	--	--	--	--	5.09	1.81	4.65	0.23	0.00	4.47	2.41	4.14	0.50				670	121
							43	15	39	2	0	39	21	36	4					
14/67	5050	3.63	9.0	60	7.4	1198	84	23	109	10	0	344	113	132	22.9	1.2	0.22	--	713	304
33n	5050	71.0	89	7.9	--	--	4.19	1.89	4.74	0.25	0.00	5.64	2.35	3.72	0.37				665n	22
							38	17	43	2	0	47	19	31	3					
09/68	5050	3.39	8.3	63	7.2	1101	80	24	98	8	0	251	114	121	24.0	0.9	0.46	--	637	298
10n	5050	30.0	86	7.3	--	--	3.99	1.97	4.26	0.20	0.00	4.11	2.37	3.41	0.39				594	93
							38	19	41	2	0	40	23	33	4					
08/68	5050	3.26	9.8	60	8.0	1114	103	24	94	6	0	279	115	126	45.9	0.8	0.24	--	697	356
1915	5050	50.0	97	7.5	--	--	5.14	1.97	4.09	0.15	0.00	4.57	2.39	3.55	0.74				653	127
							45	17	36	1	0	41	21	31	7					
13/68	5050	3.30	9.8	60	7.7	1092	102	23	85	6	0	298	119	110	24.8	1.0	0.23	--	672	349
1825	5050	50.0	97	7.3	--	--	5.09	1.89	3.70	0.15	0.00	4.88	2.48	3.10	0.40				618	105
							47	17	34	1	0	45	23	28	4					
03/68	5050	3.51	8.6	69	7.6	993	89	21	82	7	0	244	106	104	43.4	1.2	0.21	--	634	309
195n	5050	44.0	95	7.3	--	--	4.44	1.73	3.57	0.18	0.00	4.00	2.21	2.93	0.70				574	108
							45	17	36	2	0	41	22	30	7					
02/68	5050	3.16	8.8	72	8.0	1130	94	24	99	7	0	271	113	120	47.0	0.7	0.20	--	697	333
115	5050	26.0	100	7.3	--	--	4.69	1.97	4.31	0.18	0.00	4.44	2.35	3.38	0.76				639	111
							42	18	39	2	0	41	21	31	7					
02/68	5100	--	--	--	6.9	1135	106	22	98	6	0	310	110	129	25.0	0.8	0.32	--	694	355
--	5100	--	--	--	--	--	5.29	1.81	4.26	0.15	0.00	5.08	2.29	3.64	0.40				650	101
							46	16	37	1	0	44	20	32	3					
07/68	5050	--	8.1	83	7.2	1175	75	27	112	8	0	326	106	131	23.6	1.2	0.47	--	710	298
35n	5050	61.0	103	7.2	--	--	3.74	2.22	4.87	0.20	0.00	5.34	2.21	3.69	0.38				645n	31
							34	20	44	2	0	46	19	32	3					

TABLE D-2
MINERAL ANALYSES OF SURFACE WATER

DATE TIME	LAB SAMPLER	GH O	DO SAT	TEMP	LABORATORY FIELD PH EC	MINERAL CONSTITUENTS IN					MILLIGRAMS PER MILLIEQUIVALENTS PER			LITER PER LITER VALUE		MILLIGRAMS PER			LITER TDS SUM	TI NCI
						CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SI02			
STATION NUMBER Y61400.00						SANTA ANA RIVER NEAR ARLINGTON														
07/25/68	5050	3.25	7.8	83	7.3	1173	90	25	111	7	0	257	108	152	45.9	1.4	0.39	--	748	32
100A	5050	5.0	99		7.7	--	4.49	2.05	4.83	0.18	0.00	4.21	2.25	4.29	0.74				668	11
							39	18	42	1	0	37	20	37	6					
08/15/68	5050	3.26	6.3	86	7.3	1125	83	24	115	7	0	313	110	135	16.0	1.1	0.31	--	646	30
120A	5050	5.0	83		7.7	--	4.14	1.97	5.00	0.18	0.00	5.13	2.29	3.81	0.26				646	4
							37	17	44	2	0	45	20	33	2					
09/17/68	5050	3.32	5.8	85	7.2	1130	84	24	94	8	0	311	109	126	22.9	1.1	0.47	--	670	30
125A	5050	5.0	75		7.7	--	4.19	1.97	4.09	0.20	0.00	5.10	2.27	3.55	0.37				623#	5
							40	19	39	2	0	45	20	31	3					
STATION NUMBER Y71145.00						SAN TIMOTEO CREEK AT WATERMAN AVE. NEAR SAN BERNARDINO														
11/09/67	5050	--	12.1	46	8.2	362	34	6	35	3	0	154	30	16	9.0	1.4	0.06	--	235	11
1630	5050	2.0	101		7.9	--	1.70	0.49	1.52	0.08	0.00	2.52	0.62	0.45	0.14				211	
							45	13	40	2	0	67	17	12	4					
01/09/68	5050	--	10.3	47	7.7	261	26	6	20	3	0	135	18	5	1.5	0.5	0.02	--	158	9
0945	5050	1.5	87		--	--	1.30	0.49	0.87	0.08	0.00	2.21	0.37	0.14	0.02				147	
							47	18	32	3	0	80	14	5	1					
04/03/68	5050	--	9.1	63	8.0	521	47	12	40	6	0	187	46	22	29.4	0.7	0.02	--	338	16
0915	5050	0.5	94		--	--	2.34	0.99	1.74	0.15	0.00	3.06	0.96	0.62	0.47				296	1
							45	19	33	3	0	60	19	12	9					
STATION NUMBER Y82200.00						LAKE ELSINORE AT STATE PARK														
11/01/67	5050	--	7.8	60	8.5	6557	46	56	1375	36	30	495	1030	1320	2.5	1.7	2.60	--	4220	34
073A	5050	--	77		8.1	--	2.29	4.60	59.81	0.92	1.00	8.11	21.44	37.22	0.04				4144	
							3	7	88	1	1	12	32	55	0					
01/25/68	5050	--	13.4	64	8.2	5770	40	51	1212	29	0	503	899	1156	9.3	1.6	2.30	--	3736	31
1245	5050	--	140		8.4	--	1.99	4.19	52.72	0.74	0.00	8.24	18.72	32.60	0.15				3648	
							3	7	88	1	0	14	31	55	0					
03/07/68	5050	--	8.0	59	8.1	5708	43	47	1164	28	0	491	866	1141	8.1	1.7	2.05	--	3652	30
1520	5050	--	79		7.9	--	2.14	3.86	50.63	0.72	0.00	8.05	18.03	32.18	0.13				3543	
							4	7	88	1	0	14	31	55	0					
05/10/68	5050	--	12.4	76	8.3	6050	45	43	1100	26	0	495	892	987	0.3	1.5	2.50	--	3690	28
1045	5050	--	146		8.3	--	2.24	3.54	47.85	0.66	0.00	8.11	18.57	27.83	0.00				3341	
							4	6	88	1	0	15	34	51	0					
09/07/68	5050	--	7.6	83	8.5	7107	38	57	1568	35	17	570	1106	1515	0.0	1.9	2.80	--	4703	32
1040	5050	--	97		8.5	--	1.90	4.69	68.21	0.89	0.57	9.34	23.03	42.72	0.00				4621	
							2	6	90	1	1	12	30	56	0					
STATION NUMBER X21350.00						SANTA MARGARITA RIVER NEAR FALLBROOK														
11/01/67	5050	2.22	9.0	58	8.2	1294	100	35	132	4	0	364	157	158	0.5	0.6	0.20	--	805	39
083A	5050	2.0	88		--	--	4.99	2.88	5.74	0.10	0.00	5.96	3.27	4.45	0.01				767	
							36	21	42	1	0	43	24	32	0					
01/25/68	5050	3.42	10.0	50	8.2	1312	104	36	130	3	0	332	181	165	0.5	0.6	0.14	--	824	40
120A	5050	4.0	88		8.2	--	5.19	2.96	5.65	0.08	0.00	5.44	3.77	4.65	0.01				784	10
							37	21	41	0	0	39	27	33	0					
03/07/68	5050	3.38	9.6	58	8.2	1296	102	35	122	3	0	340	160	160	0.0	0.6	0.13	--	816	39
1355	5050	1.5	93		--	--	5.09	2.88	5.31	0.08	0.00	5.57	3.33	4.51	0.00				750	17
							38	22	40	1	0	41	25	34	0					
05/09/68	5050	3.29	8.2	64	8.3	1330	101	36	121	3	0	348	154	154	40.0	--	0.20	--	782	40
1535	5050	2.0	85		7.9	--	5.04	2.96	5.26	0.08	0.00	5.70	3.21	4.34	0.64				781	10
							38	22	39	1	0	41	23	31	5					
09/07/68	5050	3.18	6.6	69	8.0	1123	87	28	114	3	0	310	122	147	0.0	0.6	0.16	--	675	30
1155	5050	1.3	73		8.0	--	4.34	2.30	4.96	0.08	0.00	5.08	2.54	4.14	0.00				655	
							37	20	42	1	0	43	22	35	0					
STATION NUMBER X43400.05						ESCONDIDO CREEK NEAR HARMONY GROVE														
11/01/67	5050	--	4.5	69	7.2	2110	62	49	280	16	0	234	251	375	25.0	0.7	0.64	--	1220	30
1015	5050	4 E	50		--	--	3.09	4.03	12.18	0.41	0.00	3.83	5.22	10.57	0.40				1175	10
							16	20	62	2	0	19	26	53	2					
01/25/68	5050	--	7.9	52	6.8	2089	84	53	273	13	0	210	264	370	78.0	1.3	0.59	--	1272	40
0945	5050	4 E	71		7.6	--	4.19	4.36	11.87	0.33	0.00	3.44	5.50	10.43	1.26				1241	20
							20	21	57	2	0	17	27	51	6					
03/07/68	5050	--	9.9	65	7.0	2397	83	54	327	13	0	184	272	461	79.9	0.7	0.50	--	1394	40
1145	5050	8 E	104		--	--	4.14	4.44	14.22	0.33	0.00	3.01	5.66	14	1.29				1382	20
							18	19	61	1	0	13	25	57	6					
05/09/68	5050	--	6.6	75	7.6	2050	87	50	250	13	0	148	303	319	91.0	0.5	0.70	--	1340	40
1325	5050	10 E	77		7.3	--	4.34	4.11	10.87	0.33	0.00	2.42	6.31	8.99	1.47				1187	30
							22	21	55	2	0	13	33	47	8					
09/07/68	5050	--	2.3	76	7.3	1972	66	56	254	14	0	256	286	333	21.1	1.0	0.70	--	1172	30
133A	5050	8 E	27		7.5	--	3.29	4.60	11.05	0.36	0.00	4.19	5.95	9.39	0.34				1158	10
							17	24	57	2	0	21	30	47	2					

TABLE D-2
MINERAL ANALYSES OF SURFACE WATER

DATE TIME	LAB SAMPLER	GH Q	DO SAT	TEMP	LABORATORY FIELD		MINERAL CONSTITUENTS IN				MILLIGRAMS PER MILLIEQUIVALENTS PER PERCENT REACTANCE			LITER LITER VALUE		MILLIGRAMS PER LITER			TDS SUM	TH NCM	
					PH	EC	CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SI02			
STATION NUMBER X51230.30 SAN DIEGO RIVER AT OLD MISSION DAM																					
25/68	5050	--	7.0	49	7.2	2381	112	65	300	8	0	295	347	424	14.5	0.7	0.50	--	1490	547	
045	5050	1 E	61	7.8	--	5.59	5.34	13.05	0.20	0.00	4.83	7.22	11.96	0.23					1417	305	
							23	22	54	1	0	20	30	49	1						
06/68	5050	--	6.3	62	7.0	2225	107	61	275	10	0	273	344	366	27.0	0.6	0.54	--	1392	518	
345	5050	1 E	64	--	--	5.34	5.02	11.96	0.25	0.00	4.47	7.16	10.32	0.43					1326	294	
							24	22	53	1	0	20	32	46	2						
09/68	5050	--	6.1	64	7.8	405	116	63	302	8	0	320	358	405	5.6	0.4	0.70	--	1540	549	
03A	5050	1 E	64	7.6	--	5.79	5.18	13.14	0.20	0.00	5.24	7.45	11.42	0.09					1416	286	
							24	21	54	1	0	22	31	47	0						
STATION NUMBER X62020.05 SPRING VALLEY CREEK NEAR LA PRESSA																					
01/67	5050	--	15.6	68	7.5	12560	558	310	1860	5	0	329	922	3940	12.0	0.9	1.20	--	8450	2669	
220	5050	0.3	170	7.7	--	27.84	25.49	80.91	0.13	0.00	5.39	19.20	111.11	0.19					7771	2399	
							21	19	60	0	0	4	14	82	0						
24/68	5050	--	--	62	7.7	7692	334	206	1090	4	0	334	773	2101	48.0	0.8	0.68	--	5107	1682	
615	5050	0.3	--	8.3	--	16.67	16.94	47.41	0.10	0.00	5.47	16.09	59.25	0.77					4722	1408	
							20	21	58	0	0	7	20	73	1						
07/68	5050	--	--	58	7.6	10448	491	266	1505	4	0	383	836	3156	25.5	0.8	0.90	--	6825	2321	
810	5050	0.5	--	--	--	24.50	21.87	65.47	0.10	0.00	6.28	17.40	89.00	0.41					6474	2007	
							22	19	58	0	0	5	15	79	0						
09/68	5050	--	--	72	8.0	11000	448	275	1510	6	0	239	871	3140	2.4	0.4	1.00	--	7580	2250	
850	5050	0.3	--	8.4	--	22.35	22.61	65.68	0.15	0.00	3.92	18.13	88.55	0.04					6372	2054	
							20	20	59	0	0	3	16	80	0						

TABLE D-3 MISCELLANEOUS CONSTITUENTS IN SURFACE WATER

An explanation of column headings follows:

- Coliform - The two values represent analyses of duplicate samples collected at the same time. The determinations were made by the California Department of Public Health.
- Turbidity - The values are shown in Jackson Candle Units and reported as "Units".
- MBAS - Methylene Blue Active Substance. An indicator of the presence of the surface active agents ABS and LAS in detergents.
- Phosphate - Reported as Orthophosphate.
- Time - Pacific Standard Time on a 24-hour clock.

The LAB and SAMPLER agency codes are as follows:

- 1200 - City of Los Angeles Department of Water and Power
4412 - The Metropolitan Water District of Southern
California
5050 - Department of Water Resources
5091 - California Department of Public Health
5239 - Long Beach Health Department
5411 - United Water Conservation District
5867 - Fruit Growers Laboratory

TABLE D-3

MISCELLANEOUS CONSTITUENTS IN SURFACE WATER

SOUTHERN CALIFORNIA

DATE	TIME	SAMPLER	LAB	COLIFORM (MPN/ML)	MABS (MG/L)	ARSENIC (MG/L)	PHOSPHATE (MG/L)	TURBIDITY (UNIT)
STATION NO. D63050.00 CUYAMA RIVER NEAR GAREY								
10-04-67	0900	5050	5050	--	--	--	--	<25
11-07-67	1340	5050	5050	--	--	--	--	<25
12-11-67	1120	5050	5050	--	--	--	--	<25
01-11-68	1945	5050	5050	--	--	--	--	<25
03-15-68	1000	5050	5050	--	--	--	--	<25
04-05-68	1130	5050	5050	--	--	--	--	<25
STATION NO. D81440.00 SANTA YNEZ RIVER NEAR SOLVANG								
12-11-67	1300	5050	5050	--	--	--	--	<25
01-11-68	2040	5050	5050	--	--	--	--	<25
02-14-68	0820	5050	5050	--	--	--	--	<25
03-15-68	0950	5050	5050	--	--	--	--	<25
04-05-68	1220	5050	5050	--	--	--	--	<25
STATION NO. D81565.00 LAKE CACHUMA NEAR SANTA YNEZ								
10-04-67	1020	5050	5050	--	--	--	--	<25
11-07-67	1200	5050	5050	--	--	--	--	<25
12-11-67	1400	5050	5050	--	--	--	--	<25
01-11-68	2105	5050	5050	--	--	--	--	<25
02-14-68	0900	5050	5050	--	--	--	--	<25
03-15-68	0910	5050	5050	--	--	--	--	<25
04-05-68	1245	5050	5050	--	--	--	--	<25
06-11-68	1240	5050	5050	--	--	--	--	<25
07-22-68	0830	5050	5050	--	--	--	--	<25

TABLE D-3

MISCELLANEOUS CONSTITUENTS IN SURFACE WATER

SOUTHERN CALIFORNIA

DATE	TIME	SAMPLER	LAB	COLIFORM (MPN/ML)	MABS (MG/L)	ARSENIC (MG/L)	PHOSPHATE (MG/L)	TURBIDITY (UNIT)
STATION NO. Z11100.00 VENTURA RIVER NEAR VENTURA								
10-04-67	1130	5050	5050	--	--	--	--	<25
11-06-67	1330	5050	5050	--	--	--	--	<25
12-12-67	0845	5050	5050	--	--	--	--	<25
01-11-68	1615	5050	5050	--	--	--	--	<25
02-14-68	1020	5050	5050	--	--	--	--	<25
03-15-68	1615	5050	5050	--	--	--	--	<25
04-05-68	1400	5050	5050	--	--	--	--	<25
06-11-68	1330	5050	5050	--	--	--	--	<25
07-22-68	1130	5050	5050	--	--	--	--	<25
STATION NO. Z15500.00 MATILIJA CREEK ABOVE DAM								
10-04-67	1205	5050	5050	--	--	--	--	<25
11-06-67	1255	5050	5050	--	--	--	--	<25
12-12-67	0845	5050	5050	--	--	--	--	<25
01-11-68	1645	5050	5050	--	--	--	--	<25
02-14-68	1100	5050	5050	--	--	--	--	<25
04-05-68	1430	5050	5050	--	--	--	--	<25
06-11-68	1420	5050	5050	--	--	--	--	<25
07-23-68	1300	5050	5050	--	--	--	--	<25
STATION NO. Z21300.00 SANTA PAULA CREEK NEAR SANTA PAULA								
10-04-67	1350	5050	5050	--	--	--	--	<25
11-06-67	1210	5050	5050	--	--	--	--	<25
12-12-67	0945	5050	5050	--	--	--	--	<25
01-11-68	1545	5050	5050	--	--	--	--	<25

TABLE D-3

MISCELLANEOUS CONSTITUENTS IN SURFACE WATER

SOUTHERN CALIFORNIA

DATE	TIME	SAMPLER	LAB	COLIFORM (MPN/ML)	MABS (MG/L)	ARSENIC (MG/L)	PHOSPHATE (MG/L)	TURBIDITY (UNIT)
STATION NO. Z21300.00 SANTA PAULA CREEK NEAR SANTA PAULA								
02-13-68	1310	5050	5050	--	--	--	--	<25
03-14-68	0840	5050	5050	--	--	--	--	<25
04-05-68	1515	5050	5050	--	--	--	--	<25
06-11-68	1510	5050	5050	--	--	--	--	<25
07-22-68	1415	5050	5050	--	--	--	--	<25
STATION NO. Z21360.00 SANTA CLARA RIVER NEAR SANTA PAULA								
10-04-67	1315	5050	5050	--	--	--	--	400
11-06-67	1150	5050	5050	--	--	--	--	750
12-12-67	1115	5050	5050	--	--	--	--	<25
01-11-68	1530	5050	5050	--	--	--	--	275
03-14-68	0815	5050	5050	--	--	--	--	125
04-05-68	1535	5050	5050	--	--	--	--	<25
06-11-68	1530	5050	5050	--	--	--	--	<25
07-22-68	1445	5050	5050	--	--	--	--	<25
STATION NO. Z22150.00 SESPE CREEK NEAR FILLMORE								
10-04-67	1340	5050	5050	--	--	--	--	<25
11-06-67	1120	5050	5050	--	--	--	--	<25
12-12-67	1150	5050	5050	--	--	--	--	<25
01-11-68	1440	5050	5050	--	--	--	--	45
02-13-68	1205	5050	5050	--	--	--	--	100
03-14-68	0740	5050	5050	--	--	--	--	33
04-05-68	1605	5050	5050	--	--	--	--	<25
06-11-68	1600	5050	5050	--	--	--	--	<25

TABLE D-3

MISCELLANEOUS CONSTITUENTS IN SURFACE WATER

SOUTHERN CALIFORNIA

DATE	TIME	SAMPLER	LAB	COLIFORM (MPN/ML)	MABS (MG/L)	ARSENIC (MG/L)	PHOSPHATE (MG/L)	TURBIDIT (UNIT)
STATION NO. Z22150.00 SESPE CREEK NEAR FILLMORE								
07-22-68	1440	5050	5050	--	--	--	--	<25
STATION NO. Z23240.00 PIUR CREEK BELOW SANTA FELICIA DAM								
10-04-67	1410	5050	5050	--	--	--	--	<25
11-06-67	1045	5050	5050	--	--	--	--	<25
01-11-68	1410	5050	5050	--	--	--	--	35
02-13-68	1130	5050	5050	--	--	--	--	<25
03-14-68	0705	5050	5050	--	--	--	--	<25
04-05-68	1645	5050	5050	--	--	--	--	<25
06-11-68	1630	5050	5050	--	--	--	--	<25
07-22-68	1615	5050	5050	--	--	--	--	<25
STATION NO. Z31135.00 SANTA CLARA RIVER AT LOS ANGELES-VENTURA CO. LINE								
10-04-67	1500	5050	5050	--	--	--	--	300
11-06-67	1020	5050	5050	--	--	--	--	165
12-12-67	1315	5050	5050	--	--	--	--	60
01-11-68	1350	5050	5050	--	--	--	--	40
02-13-68	1100	5050	5050	--	--	--	--	<25
03-14-68	0630	5050	5050	--	--	--	--	240
04-05-68	1700	5050	5050	--	--	--	--	140
06-11-68	1650	5050	5050	--	--	--	--	270
STATION NO. Z61100.00 LOS ANGELES RIVER AT PACIFIC COAST HIGHWAY								
10-04-67	1030	5239	5239	50000	--	--	--	--
11-01-67	1100	5239	5239	62000	--	--	--	--
12-06-67	1130	5239	5239	240000	--	--	--	--

TABLE D-3

MISCELLANEOUS CONSTITUENTS IN SURFACE WATER

SOUTHERN CALIFORNIA

DATE	TIME	SAMPLER	LAB	COLIFORM (MPN/ML)	MABS (MG/L)	ARSENIC (MG/L)	PHOSPHATE (MG/L)	TURBIDITY (UNIT)
STATION NO. Z61100.00 LOS ANGELES RIVER AT PACIFIC COAST HIGHWAY								
01-03-68	1050	5239	5239	62000	--	--	--	--
02-07-68	1020	5239	5239	130000	--	--	--	--
03-06-68	1045	5239	5239	240	--	--	--	--
04-03-68	1100	5239	5239	2000	--	--	--	--
05-01-68	1100	5239	5239	1300	--	--	--	--
06-03-68	1015	5239	5239	7000	--	--	--	--
07-03-68	1215	5239	5239	7000	--	--	--	--
08-07-68	0950	5239	5239	620	--	--	--	--
09-04-68	1015	5239	5239	24	--	--	--	--
09-19-68	1000	5050	5050	--	--	--	9.5	28
STATION NO. Z61300.00 LOS ANGELES RIVER AT FIGUEROA STREET								
10-04-67	1125	5091	5091	7000	--	--	--	--
11-01-67	1030	5091	5091	2400	--	--	--	--
12-06-67	1120	5091	5091	7000	--	--	--	--
01-03-68	1130	5091	5091	7000	--	--	--	--
02-07-68	1130	5091	5091	2400	--	--	--	--
03-06-68	1115	5091	5091	7000	--	--	--	--
04-03-68	1130	5091	5091	7000	--	--	--	--
05-01-68	0905	5091	5091	2400	--	--	--	--
06-05-68	1115	5091	5091	7000	--	--	--	--
07-03-68	1130	5091	5091	7000	--	--	--	--
08-15-68	1140	5091	5091	7000	--	--	--	--
09-03-68	1145	5091	5091	7000	--	--	--	--

TABLE D-3

MISCELLANEOUS CONSTITUENTS IN SURFACE WATER

SOUTHERN CALIFORNIA

DATE	TIME	SAMPLER	LAB	COLIFORM (MPN/ML)	MABS (MG/L)	ARSENIC (MG/L)	PHOSPHATE (MG/L)	TURBIDITY (UNIT)
STATION NO. Z61300.00 LOS ANGELES RIVER AT FIGUEROA STREET								
09-19-68	0800	5050	5050	--	--	--	4.4	<25
STATION NO. Z61850.05 LOS ANGELES AQUEDUCT NEAR SAN FERNANDO								
10-17-67		1200	1200	--	--	--	0.26	--
11-14-67		1200	1200	--	--	--	0.16	--
12-19-67		1200	1200	--	--	--	0.15	--
01-16-68		1200	1200	--	--	--	0.13	--
02-20-68		1200	1200	--	--	--	0.13	--
03-19-68		1200	1200	--	--	--	0.16	--
04-22-68		1200	1200	--	--	--	0.12	--
05-21-68		1200	1200	--	--	--	0.21	--
06-18-68		1200	1200	--	--	--	0.22	--
07-16-68		1200	1200	--	--	--	0.20	--
08-20-68		1200	1200	--	--	--	0.24	--
09-17-68		1200	1200	--	--	--	0.34	--
STATION NO. Z69780.00 RIO HONDO ABOVE SPREADING GROUNDS								
10-06-67	0812	5050	5050	--	--	--	--	<25
11-08-67	0820	5050	5050	--	--	--	--	<25
12-15-67	1030	5050	5050	--	--	--	--	125
01-10-68	1210	5050	5050	--	--	--	--	<25
02-07-68	1145	5050	5050	--	--	--	--	<25
03-12-68	1306	5050	5050	--	--	--	--	30
04-03-68	1625	5050	5050	--	--	--	--	<25
06-17-68	1210	5050	5050	--	--	--	--	<25

TABLE D-3

MISCELLANEOUS CONSTITUENTS IN SURFACE WATER

SOUTHERN CALIFORNIA

DATE	TIME	SAMPLER	LAB	COLIFORM (MPN/ML)	MABS (MG/L)	ARSENIC (MG/L)	PHOSPHATE (MG/L)	TURBIDITY (UNIT)
STATION NO. Z69780.00 RIO HONDO ABOVE SPREADING GROUNDS								
09-16-68	0835	5050	5050	--	--	--	0.04	<25
STATION NO. Z71100.90 SAN GABRIEL RIVER AT WHITTIER NARROWS								
10-06-67	0835	5050	5050	--	--	--	--	<25
11-08-67	1010	5050	5050	--	--	--	--	<25
12-15-67	1130	5050	5050	--	--	--	--	210
01-10-68	1200	5050	5050	--	--	--	--	85
02-07-68	1205	5050	5050	--	--	--	--	260
04-03-68	1710	5050	5050	--	--	--	--	105
07-26-68	1030	5050	5050	--	--	--	--	130
08-15-68	1030	5050	5050	--	--	--	1.40	--
09-16-68	1015	5050	5050	--	--	--	1.70	--
STATION NO. Z71927.10 SAN GABRIEL RIVER AT AZUSA POWERHOUSE								
10-06-67	0650	5050	5050	--	--	--	--	<25
11-08-67	1100	5050	5050	--	--	--	--	<25
12-15-67	1330	5050	5050	--	--	--	--	33
01-08-68	1300	5050	5050	--	--	--	--	<25
02-07-68	1445	5050	5050	--	--	--	--	<25
03-12-68	1515	5050	5050	--	--	--	--	<25
08-15-68	1200	5050	5050	--	--	--	0.00	--
STATION NO. Z75100.00 RIO HONDO AT WHITTIER NARROWS								
10-06-67	0800	5050	5050	--	--	--	--	<25
11-08-67	0855	5050	5050	--	--	--	--	<25
12-15-67	0945	5050	5050	--	--	--	--	<25

TABLE D-3

MISCELLANEOUS CONSTITUENTS IN SURFACE WATER

SOUTHERN CALIFORNIA

DATE	TIME	SAMPLER	LAB	COLIFORM (MPN/ML)	MABS (MG/L)	ARSENIC (MG/L)	PHOSPHATE (MG/L)	TURBIDITY (UNIT)
STATION NO. Z75100.00 RIO HONDO AT WHITTIER NARROWS								
01-10-68	1150	5050	5050	--	--	--	--	<25
02-07-68	1115	5050	5050	--	--	--	--	<25
03-12-68	1245	5050	5050	--	--	--	--	<25
04-03-68	1640	5050	5050	--	--	--	--	<25
05-21-68		5050	5050	1840	--	--	--	--
06-17-68	1200	5050	5050	--	--	--	--	<25
06-19-68	0630	5050	5050	8400	--	--	--	--
07-17-68	0630	5050	5050	1600	--	--	--	--
07-26-68	1000	5050	5050	--	--	--	--	28
08-16-68	0900	5050	5050	--	--	--	0.68	--
08-16-68	0615	5050	5050	800	--	--	--	--
09-16-68	0910	5050	5050	--	--	--	0.02	<25
STATION NO. Z76150.00 MISSION CREEK AT WHITTIER NARROWS								
10-06-67	0745	5050	5050	--	--	--	--	<25
11-08-67	0940	5050	5050	--	--	--	--	<25
12-15-67	1100	5050	5050	--	--	--	--	<25
01-10-68	1135	5050	5050	--	--	--	--	<25
02-07-68	1055	5050	5050	--	--	--	--	<25
03-12-68	1225	5050	5050	--	--	--	--	<25
04-03-68	1655	5050	5050	--	--	--	--	<25
06-17-68	1220	5050	5050	--	--	--	--	<25
08-15-68	0945	5050	5050	--	--	--	0.32	--
09-16-68	0955	5050	5050	--	--	--	0.20	--

TABLE D-3

MISCELLANEOUS CONSTITUENTS IN SURFACE WATER

SOUTHERN CALIFORNIA

DATE	TIME	SAMPLER	LAB	COLIFORM (MPN/ML)	MABS (MG/L)	ARSENIC (MG/L)	PHOSPHATE (MG/L)	TURBIDITY (UNIT)
STATION NO. V91620.00 MOJAVE RIVER NEAR VICTORVILLE								
10-05-67	0700	5050	5050	--	--	--	--	<25
11-09-67	1400	5050	5050	--	--	--	--	<25
12-13-67	0945	5050	5050	--	--	--	--	<25
01-12-68	1240	5050	5050	--	--	--	--	<25
02-09-68	0855	5050	5050	--	--	--	--	<25
03-13-68	1045	5050	5050	--	--	--	--	<25
04-02-68	1245	5050	5050	--	--	--	--	<25
06-13-68	1230	5050	5050	--	--	--	--	<25
07-24-68	0900	5050	5050	--	--	--	--	<25
STATION NO. V92150.30 MOJAVE RIVER AT THE FORKS								
10-05-67	0745	5050	5050	--	--	--	--	125
11-09-67	1445	5050	5050	--	--	--	--	<25
12-13-67	1230	5050	5050	--	--	--	--	<25
01-12-68	1345	5050	5050	--	--	--	--	<25
03-12-68	1115	5050	5050	--	--	--	--	280
04-02-68	1100	5050	5050	--	--	--	--	<25
07-24-68	1015	5050	5050	--	--	--	--	<25
STATION NO. W21530.00 COLORADO RIVER NEAR TOPOCK								
07-17-68	0930	5050	5050	--	--	--	--	<25
09-11-68	1035	5050	5050	--	--	--	--	<25
STATION NO. W21775.10 COLORADO RIVER BELOW PARKER DAM								
07-16-68	1720	5050	5050	--	--	--	--	<25
09-11-68	0630	5050	5050	--	--	--	--	<25

TABLE D-3

MISCELLANEOUS CONSTITUENTS IN SURFACE WATER

SOUTHERN CALIFORNIA

DATE	TIME	SAMPLER	LAB	COLIFORM (MPN/ML)	MABS (MG/L)	ARSENIC (MG/L)	PHOSPHATE (MG/L)	TURBIDITY (UNIT)
STATION NO. W31070.00 WHITEWATER RIVER NEAR MECCA								
11-03-67	0945	5050	5050	--	--	--	--	350
01-22-68	1420	5050	5050	--	--	--	--	750
03-04-68	1105	5050	5050	--	--	--	--	100
09-09-68		5050	5050	--	--	--	--	165
STATION NO. W31450.00 WHITEWATER RIVER NEAR WHITEWATER								
11-03-67	1120	5050	5050	--	--	--	--	75
01-22-68	1120	5050	5050	--	--	--	--	<25
03-04-68	0910	5050	5050	--	--	--	--	135
09-09-68	1545	5050	5050	--	--	--	--	65
STATION NO. W51600.70 SALTON SEA AT SALTON SEA STATE PARK								
11-03-67	0910	5050	5050	--	--	--	--	<25
01-22-68	1535	5050	5050	--	--	--	--	65
03-04-68	1200	5050	5050	--	--	--	--	<25
09-09-68	1315	5050	5050	--	--	--	--	<25
STATION NO. W71695.00 COLORADO RIVER BELOW YUMA MAIN CANAL WASTEWAY								
11-02-67	1100	5050	5050	--	--	--	--	<25
01-24-68	1030	5050	5050	--	--	--	--	<25
03-06-68	0900	5050	5050	--	--	--	--	21
09-09-68	0935	5050	5050	--	--	--	--	<25
STATION NO. W71750.00 COLORADO RIVER BELOW MORELOS DAM								
11-02-67	1145	5050	5050	--	--	--	--	<25
01-24-68	0854	5050	5050	--	--	--	--	<25
03-06-68	0800	5050	5050	--	--	--	--	<25

TABLE D-3

MISCELLANEOUS CONSTITUENTS IN SURFACE WATER

SOUTHERN CALIFORNIA

DATE	TIME	SAMPLER	LAB	COLIFORM (MPN/ML)	MABS (MG/L)	ARSENIC (MG/L)	PHOSPHATE (MG/L)	TURBIDITY (UNIT)
STATION NO. W71870.05 COLORADO RIVER NEAR BLYTHE								
7-15-68	1430	5050	5050	--	--	--	--	<25
9-10-68	0915	5050	5050	--	--	--	--	<25
STATION NO. W71929.00 ALL AMERICAN CANAL ABOVE PILOT KNOB WASTEWAY								
1-02-67	1040	5050	5050	--	--	--	--	<25
1-24-68	1010	5050	5050	--	--	--	--	<25
3-05-68	1035	5050	5050	--	--	--	--	<25
9-09-68	0935	5050	5050	--	--	--	--	<25
STATION NO. W91100.00 NEW RIVER NEAR WESTMORLAND								
1-03-67	0800	5050	5050	--	--	--	--	150
1-23-68	1130	5050	5050	--	--	--	--	200
3-04-68	1420	5050	5050	--	--	--	--	240
9-09-68	1110	5050	5050	--	--	--	--	192
STATION NO. W91800.00 NEW RIVER AT INTERNATIONAL BOUNDARY								
1-02-67	0900	5050	5050	--	--	--	--	50
1-23-68	1410	5050	5050	--	--	--	--	40
3-05-68	0815	5050	5050	--	--	--	--	27
9-08-68	1305	5050	5050	--	--	--	1.90	<25
STATION NO. W92020.00 ALAMO RIVER AT INTERNATIONAL BOUNDARY								
1-02-67	0930	5050	5050	--	--	--	--	<25
1-23-68	1520	5050	5050	--	--	--	--	<25
3-05-68	0910	5050	5050	--	--	--	--	35
9-08-68	1355	5050	5050	--	--	--	--	<25

TABLE D-3

MISCELLANEOUS CONSTITUENTS IN SURFACE WATER

SOUTHERN CALIFORNIA

DATE	TIME	SAMPLER	LAB	COLIFORM (MPN/ML)	MABS (MG/L)	ARSENIC (MG/L)	PHOSPHATE (MG/L)	TURBIDITY (UNIT)
STATION NO. W92100.00 ALAMO RIVER NEAR CALIPATRIA								
01-23-68	1010	5050	5050	--	--	--	--	195
03-04-68	1330	5050	5050	--	--	--	--	240
09-09-68	1145	5050	5050	--	--	--	--	240
11-03-68	0820	5050	5050	--	--	--	--	250
STATION NO. Y11550.00 SANTA ANA RIVER BELOW PRADO DAM								
10-05-67	1350	5050	5050	--	0.88	--	8.80	75
11-09-67	1905	5050	5050	--	0.64	--	12.00	75
12-14-67	1600	5050	5050	--	1.20	--	7.30	265
01-09-68	1200	5050	5050	--	1.20	--	10.00	200
02-08-68	1015	5050	5050	--	1.12	--	10.00	150
03-13-68	0735	5050	5050	--	0.94	--	7.50	300
04-03-68	1100	5050	5050	--	0.80	--	6.30	525
05-02-68	1210	5050	5050	--	0.60	--	8.80	--
07-25-68	1145	5050	5050	--	0.89	--	--	--
08-15-68	1400	5050	5050	--	--	--	7.90	--
09-17-68	1410	5050	5050	--	--	--	7.00	40
STATION NO. Y21210.05 CHINO CREEK NEAR CHINO								
10-05-67	1320	5050	5050	--	1.80	--	31.00	20
11-09-67	1930	5050	5050	--	2.80	--	43.00	3
12-14-67	1645	5050	5050	--	0.30	--	11.50	4
01-09-68	1230	5050	5050	--	0.64	--	9.50	4
02-08-68	1045	5050	5050	--	0.52	--	11.50	4
03-13-68	0710	5050	5050	--	0.36	--	5.50	5

TABLE D-3

MISCELLANEOUS CONSTITUENTS IN SURFACE WATER

SOUTHERN CALIFORNIA

DATE	TIME	SAMPLER	LAB	COLIFORM (MPN/ML)	MABS (MG/L)	ARSENIC (MG/L)	PHOSPHATE (MG/L)	TURBIDITY (UNIT)
STATION NO. Y21210.05 CHINO CREEK NEAR CHINO								
4-03-68	1125	5050	5050	--	0.60	--	2.30	45
5-02-68	1230	5050	5050	--	0.10	--	2.60	--
7-25-68	1515	5050	5050	--	0.56	--	10.00	42
STATION NO. Y41100.00 WARM CREEK NEAR COLTON								
0-05-67	1040	5050	5050	--	1.80	--	24.00	50
1-09-67	1645	5050	5050	--	1.30	--	26.00	50
2-14-67	1100	5050	5050	--	2.20	--	29.00	60
1-09-68	1000	5050	5050	--	--	--	35.00	85
2-08-68	0815	5050	5050	--	2.48	--	35.00	100
3-13-68	1420	5050	5050	--	1.36	--	26.50	230
4-03-68	0700	5050	5050	--	1.60	--	8.50	90
5-02-68	1115	5050	5050	--	0.40	--	9.50	--
6-17-68	1445	5050	5050	--	1.40	--	25.50	135
7-25-68	0830	5050	5050	--	1.70	--	--	--
STATION NO. Y51080.00 SANTA ANA RIVER AT COLTON								
0-05-67	1100	5050	5050	--	1.80	--	25.00	60
1-09-67	1700	5050	5050	--	1.10	--	28.00	50
2-14-67	1230	5050	5050	--	1.80	--	27.00	140
1-09-68	1010	5050	5050	--	3.10	--	40.00	100
2-08-68	0830	5050	5050	--	2.00	--	38.00	80
3-13-68	1435	5050	5050	--	1.36	--	28.00	350
4-03-68	0650	5050	5050	--	1.28	--	18.50	130
5-02-68	1030	5050	5050	--	0.60	--	33.00	--

TABLE D-3

MISCELLANEOUS CONSTITUENTS IN SURFACE WATER

SOUTHERN CALIFORNIA

DATE	TIME	SAMPLER	LAB	COLIFORM (MPN/ML)	MABS (MG/L)	ARSENIC (MG/L)	PHOSPHATE (MG/L)	TURBIDITY (UNIT)
STATION NO. Y51080.00 SANTA ANA RIVER AT COLTON								
06-17-68	1430	5050	5050	--	1.40	--	26.50	100
07-25-68	0900	5050	5050	--	2.70	--	38.00	120
08-15-68	1130	5050	5050	--	--	--	28.00	--
STATION NO. Y51978.00 SANTA ANA RIVER NO. 1 TAILRACE NEAR MENTONE								
10-05-67	0925	5050	5050	--	--	--	--	<2
11-09-67	1610	5050	5050	--	--	--	--	<2
12-14-67	0930	5050	5050	--	--	--	--	<2
01-09-68	0900	5050	5050	--	--	--	--	<2
02-08-68	0720	5050	5050	--	--	--	--	<2
03-13-68	1345	5050	5050	--	--	--	--	<2
04-03-68	0735	5050	5050	--	--	--	--	<2
06-13-68	1430	5050	5050	--	--	--	--	<2
08-15-68	0930	5050	5050	--	--	--	0.00	--
STATION NO. Y61225.00 SANTA ANA RIVER NEAR NORCO								
10-05-67	1225	5050	5050	--	0.44	--	12.00	4
11-09-67	1820	5050	5050	--	0.84	--	13.00	3
12-14-67	1415	5050	5050	--	1.70	--	10.00	21
01-09-68	1130	5050	5050	--	1.50	--	18.50	19
02-08-68	0950	5050	5050	--	1.56	--	11.50	12
03-13-68	0810	5050	5050	--	1.24	--	9.50	40
04-03-68	1020	5050	5050	--	1.12	--	7.30	67
05-02-68	1145	5050	5050	--	1.00	--	11.00	--
06-17-68	1320	5050	5050	--	1.12	--	10.00	<1

TABLE D-3

MISCELLANEOUS CONSTITUENTS IN SURFACE WATER

SOUTHERN CALIFORNIA

DATE	TIME	SAMPLER	LAB	COLIFORM (MPN/ML)	MARS (MG/L)	ARSENIC (MG/L)	PHOSPHATE (MG/L)	TURBIDITY (UNIT)
STATION NO. Y61225.00 SANTA ANA RIVER NEAR NORCO								
7-25-68	1045	5050	5050	--	1.04	--	--	--
STATION NO. Y61400.00 SANTA ANA RIVER NEAR ARLINGTON								
0-05-67	1200	5050	5050	--	1.40	--	15.00	50
1-09-67	1745	5050	5050	--	2.10	--	18.00	50
2-14-67	1330	5050	5050	--	1.40	--	11.30	85
1-09-68	1100	5050	5050	--	1.30	--	15.00	300
2-08-68	0915	5050	5050	--	0.60	--	5.50	60
3-13-68	0825	5050	5050	--	0.92	--	6.00	210
4-03-68	0950	5050	5050	--	0.74	--	5.80	560
5-02-68	1115	5050	5050	--	0.70	--	9.50	--
6-17-68	1350	5050	5050	--	1.84	--	19.00	70
7-25-68	1000	5050	5050	--	1.10	--	10.00	55
8-15-68	1200	5050	5050	--	--	--	9.60	--
9-17-68	1250	5050	5050	--	--	--	10.00	51
STATION NO. Y71145.00 SAN TIMOTEO CREEK AT WATERMAN AVE. NEAR SAN BERNARDINO								
1-09-67	1630	5050	5050	--	--	--	--	<25
1-09-68	0945	5050	5050	--	--	--	--	165
4-03-68	0915	5050	5050	--	--	--	--	460
STATION NO. Y82200.00 LAKE ELSINORE AT STATE PARK								
1-25-68	1245	5050	5050	--	--	--	--	190
3-07-68	1520	5050	5050	--	--	--	--	800
9-07-68	1040	5050	5050	--	--	--	--	550

TABLE D-3

MISCELLANEOUS CONSTITUENTS IN SURFACE WATER

SOUTHERN CALIFORNIA

DATE	TIME	SAMPLER	LAB	COLIFORM (MPN/ML)	MABS (MG/L)	ARSENIC (MG/L)	PHOSPHATE (MG/L)	TURBIDITY (UNIT)
STATION NO. X21350.00 SANTA MARGARITA RIVER NEAR FALLBROOK								
11-01-67	0830	5050	5050	--	--	--	--	<25
01-25-68	1200	5050	5050	--	--	--	--	<25
03-07-68	1355	5050	5050	--	--	--	--	<25
09-07-68	1155	5050	5050	--	--	--	--	<25
STATION NO. X43400.05 ESCONDIDO CREEK NEAR HARMONY GROVE								
11-01-67	1015	5050	5050	--	--	--	--	<25
01-25-68	0945	5050	5050	--	--	--	--	<25
03-07-68	1145	5050	5050	--	--	--	--	4
09-07-68	1330	5050	5050	--	--	--	--	<25
STATION NO. X51230.30 SAN DIEGO RIVER AT OLD MISSION DAM								
01-25-68	0845	5050	5050	--	--	--	--	4
03-06-68	1345	5050	5050	--	--	--	--	42
STATION NO. X62020.05 SPRING VALLEY CREEK NEAR LA PRESSA								
11-01-67	1220	5050	5050	--	--	--	--	<2
01-24-68	1615	5050	5050	--	--	--	--	<2
03-07-68	0810	5050	5050	--	--	--	--	<2

Appendix E
GROUND WATER QUALITY

Appendix E

GROUND WATER QUALITY

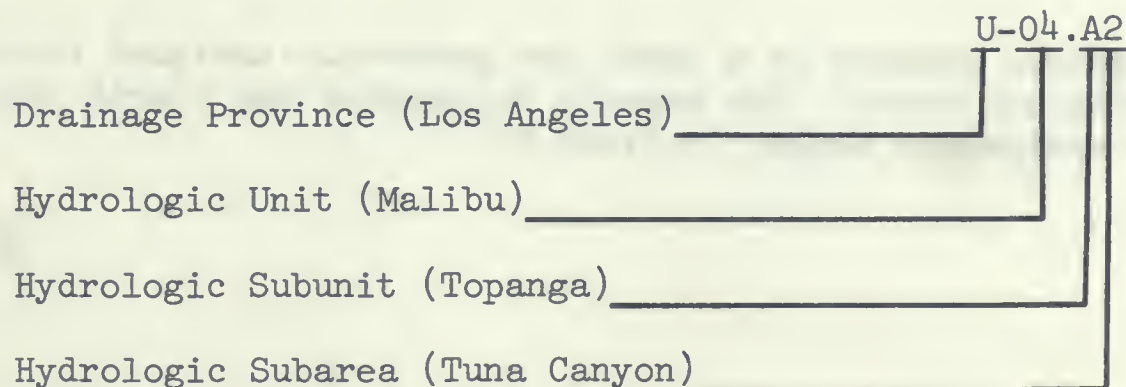
This appendix presents ground water quality data collected during the period from October 1, 1967 through September 30, 1968. The data were collected from a number of major ground water sources in Southern California in cooperation with other state, local, and federal agencies. Approximately 1500 wells were sampled during the 1968 water year.

At the time of field sampling, a temperature measurement is normally made. Comments on current conditions are noted in field books which are available in the files of the Department of Water Resources, Southern District.

Laboratory analyses of ground waters were performed in accordance with "Standard Methods for the Examination of Water and Waste Water", prepared and published jointly by the American Public Health Association, American Water Works Association, and Water Pollution Control Federation, 12th Edition, 1965. In some cases, the methods used were those presented in the U. S. Geological Survey Water Supply Paper 1454, "Methods for Collection and Analysis of Water Samples", 1960. Trace element analyses were determined by Gordon Bradford, University of California at Riverside, using a Jarrel-Ash direct reading emission spectrograph and by United States Geological Survey using a Jarrel-Ash 2.4 meter Wadsworth grating spectrograph.

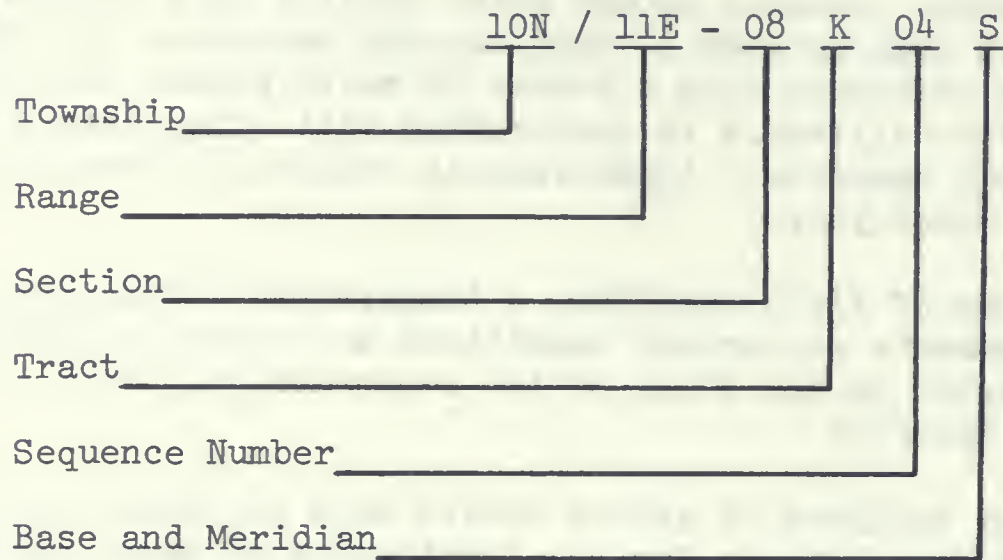
Two numbering systems are used by the Department to facilitate processing of water quality data. The two systems are the Areal Designation and the State Well Numbering systems as described below.

The Areal Designation System comprises a series of major drainage provinces which are further subdivided into hydrologic units, hydrologic subunits, and hydrologic subareas. A coding system of the form U-04.A2 has been developed as follows:



Figures E-1 through E-6 show the location and code number of the hydrologic subdivisions in each drainage province.

The State Well Numbering System is based on township, range, and section subdivision of the Public Land Survey. The number of a well, assigned in accordance with this system, is referred to as the State Well Number, as illustrated below:



This number identifies and locates the well. In the example, the well is in Township 10 North, Range 11 East, Tract K of Section 8, located in the San Bernardino Base and Meridian. A section is divided into 40-acre tracts as follows:

D	C	B	A
E	F	G	H
M	L	K	J
N	P	Q	R

Sequence numbers in a tract are generally assigned in chronological order. The example designates the fourth well to be assigned a number in Tract K.

UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
WATER RESOURCES DIVISION



FIGURES

UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
WATER RESOURCES DIVISION

**AREAL DESIGNATIONS
HYDROLOGIC UNITS SUBUNITS AND SUBAREAS
CENTRAL COASTAL DRAINAGE PROVINCE**

T-09.00	SALINAS HYDROLOGIC UNIT
T-09.H0	Paso Robles Hydrologic Subunit
T-09.I0	Pozo Hydrologic Subunit
T-10.00	SAN LUIS OBISPO HYDROLOGIC UNIT
T-10.A0	Cambria Hydrologic Subunit
T-10.A1	San Carpoforo Hydrologic Subarea
T-10.A2	Arroyo De La Cruz Hydrologic Subarea
T-10.A3	San Simeon Hydrologic Subarea
T-10.A4	Santa Rosa Hydrologic Subarea
T-10.A5	Villa Hydrologic Subarea
T-10.A6	Cayucos Hydrologic Subarea
T-10.A7	Old Hydrologic Subarea
T-10.A8	Toro Hydrologic Subarea
T-10.B0	San Luis Obispo Hydrologic Subunit
T-10.B1	Morro Hydrologic Subarea
T-10.B2	Chorro Hydrologic Subarea
T-10.B3	Los Osos Hydrologic Subarea
T-10.B4	San Luis Obispo Creek Hydrologic Subarea
T-10.B5	Point San Luis Hydrologic Subarea
T-10.B6	Pismo Hydrologic Subarea
T-10.C0	Arroyo Grande Hydrologic Subunit
T-10.C1	Arroyo Grande Hydrologic Subarea
T-10.C2	Nipomo Mesa Hydrologic Subarea
T-11.00	CARRIZO PLAIN HYDROLOGIC UNIT
T-12.00	SANTA MARIA-CUYAMA HYDROLOGIC UNIT
T-12.A0	Santa Maria Hydrologic Subunit
T-12.B0	Sisquoc Hydrologic Subunit
T-12.C0	Cuyama Valley Hydrologic Subunit
T-13.00	SAN ANTONIO HYDROLOGIC UNIT
T-14.00	SANTA YNEZ HYDROLOGIC UNIT
T-14.A0	Lompoc Hydrologic Subunit
T-14.E0	Santa Rita Hydrologic Subunit
T-14.C0	Buellton Hydrologic Subunit
T-14.D0	Santa Ynez Hydrologic Subunit
T-14.E0	Headwater Hydrologic Subunit
T-15.00	SANTA BARBARA HYDROLOGIC UNIT
T-15.A0	Arguello Hydrologic Subunit
T-15.C0	South Coast Hydrologic Subunit
T-15.C1	Goleta Hydrologic Subarea
T-15.C2	Santa Barbara Hydrologic Subarea
T-15.C3	Montecito Hydrologic Subarea
T-15.C4	Carpinteria Hydrologic Subarea

- LEGEND**
- DRAINAGE PROVINCE BOUNDARY
 - HYDROLOGIC UNIT BOUNDARY
 - HYDROLOGIC SUBUNIT BOUNDARY
 - HYDROLOGIC SUBAREA BOUNDARY
 - 10.A4 AREAL CODE NUMBER (SEE PAGE TO THE LEFT)
 - WATER BEARING SEDIMENTS



**NAMES AND AREAL CODE NUMBERS OF HYDROLOGIC AREAS
CENTRAL COASTAL DRAINAGE PROVINCE (T)**

AREAL DESIGNATIONS
HYDROLOGIC UNITS SUBUNITS AND SUBAREAS
LOS ANGELES DRAINAGE PROVINCE

U-01.00	RINCON CREEK HYDROLOGIC UNIT	U-04.C0	Point Dume Hydrologic Subunit
U-02.00	VENTURA RIVER HYDROLOGIC UNIT	U-04.C1	Corral Canyon Hydrologic Subarea
U-02.A0	Lower Ventura River Hydrologic Subunit	U-04.C2	Solstice Canyon Hydrologic Subarea
U-02.B0	Upper Ventura River Hydrologic Subunit	U-04.C3	Latigo Canyon Hydrologic Subarea
U-02.C0	Ojai Hydrologic Subunit	U-04.C4	Escondido Canyon Hydrologic Subarea
U-02.C1	Upper Ojai Hydrologic Subarea	U-04.C5	Ramera Canyon Hydrologic Subarea
U-02.C2	Ojai Hydrologic Subarea	U-04.C6	Zuma Canyon Hydrologic Subarea
		U-04.C7	Trancas Canyon Hydrologic Subarea
U-03.00	SANTA CLARA-CALLEGUAS HYDROLOGIC UNIT	U-04.D0	Camarillo Hydrologic Subunit
U-03.A0	Oxnard Plain Hydrologic Subunit	U-04.D1	Encinal Canyon Hydrologic Subarea
U-03.A1	Oxnard Hydrologic Subarea	U-04.D2	Los Alisos Canyon Hydrologic Subarea
U-03.A2	Pleasant Valley Hydrologic Subarea	U-04.D3	Nicholas Canyon Hydrologic Subarea
U-03.B0	Santa Paula Hydrologic Subunit	U-04.D4	Arroyo Sequit Hydrologic Subarea
U-03.B1	Santa Paula Hydrologic Subarea	U-04.D5	Little Sycamore Canyon Hydrologic Subarea
U-03.B2	Sisar Hydrologic Subarea	U-04.D6	Deer Canyon Hydrologic Subarea
U-03.C0	Sespe Hydrologic Subunit	U-04.D7	Big Sycamore Canyon Hydrologic Subarea
U-03.C1	Fillmore Hydrologic Subarea	U-04.D8	La Jolla Valley Hydrologic Subarea
U-03.C2	Sespe Hydrologic Subarea		
U-03.D0	Piru Hydrologic Subunit	U-05.00	LOS ANGELES-SAN GABRIEL RIVER HYDROLOGIC UNIT
U-03.D1	Piru Hydrologic Subarea	U-05.A0	Coastal Plain of Los Angeles County Hydrologic Subunit
U-03.D2	Upper Piru Hydrologic Subarea	U-05.A1	Palos Verdes Hydrologic Subarea
U-03.D3	Hungry Valley Hydrologic Subarea	U-05.A2	West Coast Hydrologic Subarea
U-03.D4	Stauffer Hydrologic Subarea	U-05.A3	Santa Monica Hydrologic Subarea
U-03.E0	Upper Santa Clara River Hydrologic Subunit	U-05.A4	Hollywood Hydrologic Subarea
U-03.E1	Eastern Hydrologic Subarea	U-05.A5	Central Hydrologic Subarea
U-03.E2	Bouquet Hydrologic Subarea	U-05.B0	San Fernando Hydrologic Subunit
U-03.E3	Mint Canyon Hydrologic Subarea	U-05.B1	San Fernando Hydrologic Subarea
U-03.E4	Sierra Pelona Hydrologic Subarea	U-05.B2	Sylmar Hydrologic Subarea
U-03.E5	Acton Hydrologic Subarea	U-05.B3	Tujunga Hydrologic Subarea
U-03.F0	Calleguas-Conejo Hydrologic Subunit	U-05.B4	Verdugo Hydrologic Subarea
U-03.F1	West Las Posas Hydrologic Subarea	U-05.B5	Eagle Rock Hydrologic Subarea
U-03.F2	East Las Posas Hydrologic Subarea	U-05.C0	Raymond Hydrologic Subunit
U-03.F3	Arroyo Santa Rosa Hydrologic Subarea	U-05.C1	Pasadena Hydrologic Subarea
U-03.F4	Conejo Valley Hydrologic Subarea	U-05.C2	Monk Hill Hydrologic Subarea
U-03.F5	Tierra Rejada Valley Hydrologic Subarea	U-05.C3	Santa Anita Hydrologic Subarea
U-03.F6	Gillibrand Hydrologic Subarea	U-05.D0	San Gabriel Valley Hydrologic Subunit
U-03.F7	Simi Valley Hydrologic Subarea	U-05.D1	Main San Gabriel Hydrologic Subarea
U-03.F8	Thousand Oaks Hydrologic Subarea	U-05.D2	Lower Canyon Hydrologic Subarea
		U-05.D3	Upper Canyon Hydrologic Subarea
		U-05.D4	Foothill Hydrologic Subarea
U-04.00	MALIBU HYDROLOGIC UNIT	U-05.E0	Spadra Hydrologic Subunit
U-04.A0	Topanga Hydrologic Subunit	U-05.E1	Spadra Hydrologic Subarea
U-04.A1	Topanga Canyon Hydrologic Subarea	U-05.E2	Pomona Hydrologic Subarea
U-04.A2	Tuna Canyon Hydrologic Subarea	U-05.E3	Live Oak Hydrologic Subarea
U-04.A3	Pena Canyon Hydrologic Subarea	U-05.F0	Anaheim Hydrologic Subunit
U-04.A4	Piedra Gorda Canyon Hydrologic Subarea	U-05.F1	Anaheim Hydrologic Subarea
U-04.A5	Las Flores Canyon Hydrologic Subarea	U-05.F2	La Habra Hydrologic Subarea
U-04.A6	Carbon Canyon Hydrologic Subarea	U-05.F3	Yorba Linda Hydrologic Subarea
U-04.B0	Malibu Creek Hydrologic Subunit		
U-04.B1	Malibu Creek Hydrologic Subarea		
U-04.B2	Las Virgenes Canyon Hydrologic Subarea		
U-04.B3	Lindero Canyon Hydrologic Subarea		
U-04.B4	Triunfo Canyon Hydrologic Subarea		
U-04.B5	Russell Valley Hydrologic Subarea		
U-04.B6	Sherwood Hydrologic Subarea		



**NAMES AND AREAL CODE NUMBERS OF HYDROLOGIC AREAS
LOS ANGELES DRAINAGE PROVINCE (U)**

**AREAL DESIGNATIONS
HYDROLOGIC UNITS SUBUNITS AND SUBAREAS
LAHONTAN DRAINAGE PROVINCE**

W-01.00	MONO HYDROLOGIC UNIT	W-20.00	PANAMINT HYDROLOGIC UNIT
W-02.00	ADOBE HYDROLOGIC UNIT	W-20.A0	Wingate Pass Hydrologic Subunit
W-03.00	OWENS HYDROLOGIC UNIT	W-20.B0	Wild Rose Hydrologic Subunit
W-03.A0	Long Hydrologic Subunit	W-20.B1	White Sage Hydrologic Subarea
W-03.B0	Upper Owens Hydrologic Subunit	W-20.B2	Wild Rose Hydrologic Subarea
W-03.C0	Lower Owens Hydrologic Subunit	W-20.C0	Lee Flat Hydrologic Subunit
W-03.D0	Centennial Hydrologic Subunit	W-20.D0	Santa Rosa Flat Hydrologic Subunit
W-04.00	FISH LAKE HYDROLOGIC UNIT	W-20.D1	Santa Rosa Flat Hydrologic Subarea
W-05.00	DEEP SPRINGS HYDROLOGIC UNIT	W-20.D2	Rainbow Hydrologic Subarea
W-06.00	EUREKA HYDROLOGIC UNIT	W-20.D3	Silver Dollar Hydrologic Subarea
W-06.A0	Marble Bath Hydrologic Subunit	W-20.E0	Darwin Hydrologic Subunit
W-06.B0	Eureka Hydrologic Subunit	W-20.F0	Panamint Hydrologic Subunit
W-07.00	SALINE HYDROLOGIC UNIT	W-20.G0	Brown Hydrologic Subunit
W-07.A0	Saline Hydrologic Subunit	W-20.H0	Robbers Hydrologic Subunit
W-07.B0	Cameo Hydrologic Subunit	W-21.00	SEARLES HYDROLOGIC UNIT
W-08.00	RACE TRACK HYDROLOGIC UNIT	W-21.A0	Searles Hydrologic Subunit
W-08.A0	Race Track Hydrologic Subunit	W-21.B0	Salt Wells Hydrologic Subunit
W-08.B0	Hidden Valley Hydrologic Subunit	W-21.C0	Pilot Knob Hydrologic Subunit
W-08.C0	Ulida Hydrologic Subunit	W-22.00	COSO HYDROLOGIC UNIT
W-08.D0	Sand Flat Hydrologic Subunit	W-22.A0	Wild Horse Hydrologic Subunit
W-09.00	AMARGOSA HYDROLOGIC UNIT	W-22.B0	Coso Hydrologic Subunit
W-09.A0	Death Valley Hydrologic Subunit	W-23.00	UPPER CACTUS HYDROLOGIC UNIT
W-09.A1	Death Valley Hydrologic Subarea	W-24.00	INDIAN WELLS HYDROLOGIC UNIT
W-09.A2	Harrisburgh Hydrologic Subarea	W-24.A0	Rose Hydrologic Subunit
W-09.A3	Wingate Wash Hydrologic Subarea	W-24.B0	Indian Wells Hydrologic Subunit
W-09.B0	Valjean Hydrologic Subunit	W-25.00	FREMONT HYDROLOGIC UNIT
W-09.B1	Avawatz Hydrologic Subarea	W-25.A0	Dove Springs Hydrologic Subunit
W-09.B2	Red Pass Hydrologic Subarea	W-25.B0	Kelso Landis Hydrologic Subunit
W-09.B3	Valjean Hydrologic Subarea	W-25.C0	East Tehachapi Hydrologic Subunit
W-09.B4	Shadow Hydrologic Subarea	W-25.D0	Koehn Hydrologic Subunit
W-09.C0	Furnace Creek Hydrologic Subunit	W-26.00	ANTELOPE HYDROLOGIC UNIT
W-09.C1	Furnace Creek Hydrologic Subarea	W-26.A0	Antelope Hydrologic Subunit
W-09.C2	Greenwater Hydrologic Subarea	W-26.A1	Chafee Hydrologic Subarea
W-09.D0	Amargosa Hydrologic Subunit	W-26.A2	Gloster Hydrologic Subarea
W-09.D1	Calico Hydrologic Subarea	W-26.A3	Willow Springs Hydrologic Subarea
W-09.D2	Amargosa Hydrologic Subarea	W-26.A4	Neenach Hydrologic Subarea
W-09.D3	Chicago Hydrologic Subarea	W-26.A5	Lancaster Hydrologic Subarea
W-09.D4	California Hydrologic Subarea*	W-26.A6	North Muroc Hydrologic Subarea
W-10.00	PAHRUMP HYDROLOGIC UNIT	W-26.A7	Buttes Hydrologic Subarea
W-11.00	MESQUITE HYDROLOGIC UNIT	W-26.A8	Rock Creek Hydrologic Subarea
W-12.00	IVANPAH HYDROLOGIC UNIT	W-27.00	CUDDEBACK HYDROLOGIC UNIT
W-13.00	OWLSHEAD HYDROLOGIC UNIT	W-28.00	MOJAVE HYDROLOGIC UNIT
W-13.A0	Lost Lake Hydrologic Subunit	W-28.A0	El Mirage Hydrologic Subunit
W-13.B0	Owlshead Hydrologic Subunit	W-28.B0	Upper Mojave Hydrologic Subunit
W-14.00	LEACH HYDROLOGIC UNIT	W-28.C0	Middle Mojave Hydrologic Subunit
W-15.00	NELSON HYDROLOGIC UNIT	W-28.D0	Harper Hydrologic Subunit
W-15.A0	McLean Hydrologic Subunit	W-28.D1	Grass Valley Hydrologic Subarea
W-15.B0	Nelson Hydrologic Subunit	W-28.D2	Harper Hydrologic Subarea
W-16.00	BICYCLE HYDROLOGIC UNIT	W-28.E0	Lower Mojave Hydrologic Subunit
W-17.00	GOLDSTONE HYDROLOGIC UNIT	W-28.F0	Troy Hydrologic Subunit
W-18.00	COYOTE HYDROLOGIC UNIT	W-28.F1	Kane Wash Hydrologic Subarea
W-19.00	SUPERIOR HYDROLOGIC UNIT	W-28.F2	Troy Hydrologic Subarea
		W-28.G0	Afton Hydrologic Subunit
		W-28.G1	Caves Hydrologic Subarea
		W-28.G2	Cronese Hydrologic Subarea
		W-28.G3	Langford Hydrologic Subarea
		W-28.H0	Baker Hydrologic Subunit
		W-28.H1	Silver Lake Hydrologic Subarea
		W-28.H2	Soda Lake Hydrologic Subarea
		W-28.I0	Kelso Hydrologic Subunit
		W-29.00	BROADWELL HYDROLOGIC UNIT



**NAMES AND AREAL CODE NUMBERS OF HYDROLOGIC AREAS
LAHONTAN DRAINAGE PROVINCE (W)**

AREAL DESIGNATIONS
HYDROLOGIC UNITS SUBUNITS AND SUBAREAS
COLORADO RIVER BASIN DRAINAGE PROVINCE






X-1.00	LUCERNE HYDROLOGIC UNIT	X-19.00	WHITEWATER HYDROLOGIC UNIT
X-2.00	JOHNSON HYDROLOGIC UNIT	X-19.A0	Morongo Hydrologic Subunit
X-3.00	BESSEMER HYDROLOGIC UNIT	X-19.B0	Shavers Hydrologic Subunit
X-4.00	MEANS HYDROLOGIC UNIT	X-19.C0	San Gorgonio Hydrologic Subunit
X-5.00	EMERSON HYDROLOGIC UNIT	X-19.C1	Beaumont Hydrologic Subarea
X-6.00	LAVIC HYDROLOGIC UNIT	X-19.C2	San Gorgonio Hydrologic Subarea
X-7.00	DEADMAN HYDROLOGIC UNIT	X-19.D0	Coachella Hydrologic Subunit
X-8.00	JOSHUA TREE HYDROLOGIC UNIT	X-19.D1	Garnet Hill Hydrologic Subarea
X-8.A0	Warren Hydrologic Subunit	X-19.D2	Mission Creek Hydrologic Subarea
X-8.B0	Copper Mountain Hydrologic Subunit	X-19.D3	Miracle Hill Hydrologic Subarea
X-9.00	DALE HYDROLOGIC UNIT	X-19.D4	Sky Valley Hydrologic Subarea
X-9.A0	Twentynine Palms Hydrologic Subunit	X-19.D5	Fargo Canyon Hydrologic Subarea
X-9.B0	Dale Hydrologic Subunit	X-19.D6	Thousand Palms Hydrologic Subarea
X-10.00	BRISTOL HYDROLOGIC UNIT	X-19.D7	Indio Hydrologic Subarea
X-10.A0	Bristol Hydrologic Subunit	X-20.00	CLARK HYDROLOGIC UNIT
X-10.B0	Fenner Hydrologic Subunit	X-21.00	WEST SALTON SEA HYDROLOGIC UNIT
X-11.00	CADIZ HYDROLOGIC UNIT	X-22.00	ANZA-BORREGO HYDROLOGIC UNIT
X-12.00	WARD HYDROLOGIC UNIT	X-22.A0	Borrego Hydrologic Subunit
X-13.00	PIUTE HYDROLOGIC UNIT	X-22.A1	Terwilliger Hydrologic Subarea
X-13.A0	Lanfair Hydrologic Subunit	X-22.A2	Collins Hydrologic Subarea
X-13.B0	Piute Hydrologic Subunit	X-22.A3	Borrego Hydrologic Subarea
X-13.C0	Needles Hydrologic Subunit	X-22.B0	Ocotillo-Lower San Felipe Hydrologic Subunit
X-14.00	CHEMEHUEVIS HYDROLOGIC UNIT	X-22.C0	Mescal Bajada Hydrologic Subunit
X-15.00	COLORADO HYDROLOGIC UNIT	X-22.D0	San Felipe Hydrologic Subunit
X-15.A0	Vidal Hydrologic Subunit	X-22.E0	Mason Hydrologic Subunit
X-15.B0	Big Wash Hydrologic Subunit	X-22.F0	Vallecito-Carrizo Hydrologic Subunit
X-15.C0	Quien Sabe Hydrologic Subunit	X-22.F1	Carrizo Hydrologic Subarea
X-15.D0	Palo Verde Hydrologic Subunit	X-22.F2	Vallecito Hydrologic Subarea
X-15.E0	Arroyo Seco Hydrologic Subunit	X-22.F3	Canebrake Hydrologic Subarea
X-16.00	RICE HYDROLOGIC UNIT	X-22.G0	Jacumba Hydrologic Subunit
X-17.00	CHUCKWALLA HYDROLOGIC UNIT	X-22.G1	McCain Hydrologic Subarea
X-17.A0	Ford Hydrologic Subunit	X-22.G2	Jacumba Hydrologic Subarea
X-17.B0	Palen Hydrologic Subunit	X-23.00	IMPERIAL HYDROLOGIC UNIT
X-17.C0	Pinto Hydrologic Subunit	X-23.A0	Imperial Hydrologic Subunit
X-17.D0	Pleasant Hydrologic Subunit	X-23.B0	Coyote Wells Hydrologic Subunit
X-18.00	HAYFIELD HYDROLOGIC UNIT	X-24.00	DAVIES HYDROLOGIC UNIT
		X-25.00	EAST SALTON SEA HYDROLOGIC UNIT
		X-26.00	AMOS-OGILBY HYDROLOGIC UNIT
		X-27.00	YUMA HYDROLOGIC UNIT



**NAMES AND AREAL CODE NUMBERS OF HYDROLOGIC AREAS
COLORADO RIVER BASIN DRAINAGE PROVINCE (X)**

AREAL DESIGNATIONS
HYDROLOGIC UNITS SUBUNITS AND SUBAREAS
SANTA ANA DRAINAGE PROVINCE

Y-01.00	SANTA ANA RIVER HYDROLOGIC UNIT
Y-01.A0	Lower Santa Ana River Hydrologic Subunit
Y-01.A1	East Coastal Plain Hydrologic Subarea
Y-01.A2	Santiago Hydrologic Subarea
Y-01.A3	Santa Ana Narrows Hydrologic Subarea
Y-01.B0	Middle Santa Ana River Hydrologic Subunit
Y-01.B1	Chino Hydrologic Subarea
Y-01.B2	Harrison Hydrologic Subarea
Y-01.B3	Claremont Heights Hydrologic Subarea
Y-01.B4	Cucamonga Hydrologic Subarea
Y-01.B5	Temescal Hydrologic Subarea
Y-01.B6	Arlington Hydrologic Subarea
Y-01.B7	Riverside Hydrologic Subarea
Y-01.C0	Lake Methews Hydrologic Subunit
Y-01.C1	Coldwater Hydrologic Subarea
Y-01.C2	Bedford Hydrologic Subarea
Y-01.C3	Cajalco Hydrologic Subarea
Y-01.C4	Lee Lake Hydrologic Subarea
Y-01.C5	Terra Cotta Hydrologic Subarea
Y-01.D0	Colton-Rialto Hydrologic Subunit
Y-01.D1	Upper Lytle Hydrologic Subarea
Y-01.D2	Lower Lytle Hydrologic Subarea
Y-01.D3	Upper Colton-Rialto Hydrologic Subarea
Y-01.D4	Colton-Rialto Hydrologic Subarea
Y-01.D5	Reche Hydrologic Subarea
Y-01.E0	Upper Santa Ana River Hydrologic Subunit
Y-01.E1	Cajon Hydrologic Subarea
Y-01.E2	Bunker Hill Hydrologic Subarea
Y-01.E3	Redlands Hydrologic Subarea
Y-01.E4	Mentone Hydrologic Subarea
Y-01.E5	Reservoir Hydrologic Subarea
Y-01.E6	Crafton Hydrologic Subarea
Y-01.E7	Santa Ana Canyon Hydrologic Subarea
Y-01.E8	Mill Creek Hydrologic Subarea
Y-01.E9	Sycamore Hydrologic Subarea
Y-01.F0	San Timoteo Hydrologic Subunit
Y-01.F1	Yucaipa Hydrologic Subarea
Y-01.F2	San Timoteo Hydrologic Subarea
Y-01.F3	Cherry Valley Hydrologic Subarea
Y-01.F4	Chicken Hill Hydrologic Subarea
Y-01.F5	Gateway Hydrologic Subarea
Y-01.F6	Oak Glen Hydrologic Subarea
Y-01.F7	South Mesa Hydrologic Subarea
Y-01.F8	Triple Falls Creek Hydrologic Subarea
Y-01.F9	Nobie Creek Hydrologic Subarea
Y-01.G0	San Bernardino Mountain Hydrologic Subunit
Y-01.G1	Bear Valley Hydrologic Subarea
Y-01.G2	Seven Oaks Hydrologic Subarea
Y-01.G3	Baldwin Hydrologic Subarea
Y-02.00	SAN JACINTO VALLEY HYDROLOGIC UNIT
Y-02.A0	Perris Hydrologic Subunit
Y-02.A1	Perris Valley Hydrologic Subarea
Y-02.A2	Menifee Hydrologic Subarea
Y-02.A3	Winchester Hydrologic Subarea
Y-02.A4	Lakeview Hydrologic Subarea
Y-02.A5	Hemet Hydrologic Subarea
Y-02.B0	San Jacinto Hydrologic Subunit
Y-02.B1	San Jacinto Hydrologic Subarea
Y-02.B2	Hemet Lake Hydrologic Subarea
Y-02.B3	Bautista Hydrologic Subarea
Y-02.C0	Elsinore Hydrologic Subunit
Y-02.C1	Elsinore Hydrologic Subarea
Y-02.C2	Railroad Hydrologic Subarea

- LEGEND**
-  DRAINAGE PROVINCE BOUNDARY
 -  HYDROLOGIC UNIT BOUNDARY
 -  HYDROLOGIC SUBUNIT BOUNDARY
 -  HYDROLOGIC SUBAREA BOUNDARY
 - 10.A4** AREAL CODE NUMBER (SEE PAGE TO THE LEFT)
 -  WATER BEARING SEDIMENTS



KEY MAP



**NAMES AND AREAL CODE NUMBERS OF HYDROLOGIC AREAS
SANTA ANA DRAINAGE PROVINCE (Y)**

AREAL DESIGNATIONS
HYDROLOGIC UNITS SUBUNITS AND SUBAREAS
SAN DIEGO DRAINAGE PROVINCE

Z-01.00	SAN JUAN HYDROLOGIC UNIT	Z-05.D0	Santa Maria Valley Hydrologic Subunit
Z-01.A0	Laguna Hydrologic Subunit	Z-05.D1	Ramona Hydrologic Subarea
Z-01.A1	San Joaquin Hydrologic Subarea	Z-05.D2	Lower Hatfield Hydrologic Subarea
Z-01.A2	Laguna Hydrologic Subarea	Z-05.D3	Wash Hollow Hydrologic Subarea
Z-01.A3	Aliso Hydrologic Subarea	Z-05.D4	Upper Hatfield Hydrologic Subarea
Z-01.A4	Dana Point Hydrologic Subarea	Z-05.D5	Ballena Hydrologic Subarea
Z-01.B0	San Juan Hydrologic Subunit	Z-05.D6	East Santa Teresa Hydrologic Subarea
Z-01.C0	San Clemente Hydrologic Subunit	Z-05.D7	West Santa Teresa Hydrologic Subarea
Z-01.D0	San Mateo Hydrologic Subunit	Z-05.E0	Santa Ysabel Hydrologic Subunit
Z-01.E0	San Onofre Hydrologic Subunit	Z-05.E1	Boden Hydrologic Subarea
Z-01.E1	San Onofre Hydrologic Subarea	Z-05.E2	Pamo Hydrologic Subarea
Z-01.E2	Las Pulgas Hydrologic Subarea	Z-05.F3	Sutherland Hydrologic Subarea
Z-01.E3	Stuart Hydrologic Subarea	Z-05.E4	Santa Ysabel Hydrologic Subarea
Z-02.00	SANTA MARGARITA HYDROLOGIC UNIT	Z-06.00	PENASQUITOS HYDROLOGIC UNIT
Z-02.A0	Ysidora Hydrologic Subunit	Z-06.A0	Soledad Hydrologic Subunit
Z-02.A1	Ysidora Hydrologic Subarea	Z-06.B0	Poway Hydrologic Subunit
Z-02.A2	Chappo Hydrologic Subarea	Z-06.C0	Scripps Hydrologic Subunit
Z-02.A3	Upper Ysidora Hydrologic Subarea	Z-06.D0	Miramar Hydrologic Subunit
Z-02.B0	De Luz Hydrologic Subunit	Z-06.E0	Tecolote Hydrologic Subunit
Z-02.B1	De Luz Hydrologic Subarea	Z-07.00	SAN DIEGO HYDROLOGIC UNIT
Z-02.B2	Gavilan Hydrologic Subarea	Z-07.A0	Lower San Diego Hydrologic Subunit
Z-02.B3	Vallecitos Hydrologic Subarea	Z-07.A1	Mission San Diego Hydrologic Subarea
Z-02.C0	Murrieta Hydrologic Subunit	Z-07.A2	Santee Hydrologic Subarea
Z-02.C1	Wildomar Hydrologic Subarea	Z-07.A3	El Cajon Hydrologic Subarea
Z-02.C2	Murrieta Hydrologic Subarea	Z-07.A4	Coches Hydrologic Subarea
Z-02.C3	French Hydrologic Subarea	Z-07.A5	El Monte Hydrologic Subarea
Z-02.C4	Lower Domenigoni Hydrologic Subarea	Z-07.B0	San Vicente Hydrologic Subunit
Z-02.C5	Domenigoni Hydrologic Subarea	Z-07.B1	San Vicente Hydrologic Subarea
Z-02.C6	Diamond Hydrologic Subarea	Z-07.B2	Kimball Hydrologic Subarea
Z-02.D0	Auld Hydrologic Subunit	Z-07.B3	Gower Hydrologic Subarea
Z-02.D1	Auld Hydrologic Subarea	Z-07.B4	Barona Hydrologic Subarea
Z-02.D2	Gertrudis Hydrologic Subarea	Z-07.C0	El Capitan Hydrologic Subunit
Z-02.D3	Lower Tualota Hydrologic Subarea	Z-07.C1	El Capitan Hydrologic Subarea
Z-02.D4	Tualota Hydrologic Subarea	Z-07.C2	Glen Oaks Hydrologic Subarea
Z-02.E0	Pechanga Hydrologic Subunit	Z-07.C3	Alpine Hydrologic Subarea
Z-02.E1	Pauba Hydrologic Subarea	Z-07.D0	Cuyamaca Hydrologic Subunit
Z-02.E2	Pechanga Hydrologic Subarea	Z-07.D1	Inaja Hydrologic Subarea
Z-02.F0	Wilson Hydrologic Subunit	Z-07.D2	Spencer Hydrologic Subarea
Z-02.F1	Lancaster Valley Hydrologic Subarea	Z-07.D3	Cuyamaca Hydrologic Subarea
Z-02.F2	Lewis Hydrologic Subarea	Z-08.00	CORNADO HYDROLOGIC UNIT
Z-02.F3	Wilson Hydrologic Subarea	Z-08.A0	Point Loma Hydrologic Subunit
Z-02.G0	Anza Hydrologic Subunit	Z-08.B0	San Diego Mesa Hydrologic Subunit
Z-02.G1	Lower Coahuila Hydrologic Subarea	Z-08.B1	Lindbergh Hydrologic Subarea
Z-02.G2	Upper Coahuila Hydrologic Subarea	Z-08.B2	Chollas Hydrologic Subarea
Z-02.G3	Anza Hydrologic Subarea	Z-08.C0	Paradise Hydrologic Subunit
Z-02.G4	Burnt Hydrologic Subarea	Z-08.C1	El Toyon Hydrologic Subarea
Z-02.H0	Aguanga Hydrologic Subunit	Z-08.C2	Paradise Hydrologic Subarea
Z-02.H1	Vail Hydrologic Subarea	Z-09.00	SWEETWATER HYDROLOGIC UNIT
Z-02.H2	Devils Hole Hydrologic Subarea	Z-09.A0	Lower Sweetwater Hydrologic Subunit
Z-02.H3	Redec Hydrologic Subarea	Z-09.A1	Telegraph Hydrologic Subarea
Z-02.H4	Aguanga Hydrologic Subarea	Z-09.A2	Sweetwater Hydrologic Subarea
Z-02.I0	Oakgrove Hydrologic Subunit	Z-09.B0	Middle Sweetwater Hydrologic Subunit
Z-02.I1	Lower Culp Hydrologic Subarea	Z-09.B1	Jamacha Hydrologic Subarea
Z-02.I2	Oakgrove Hydrologic Subarea	Z-09.B2	Hillsdale Hydrologic Subarea
Z-02.I3	Dodge Hydrologic Subarea	Z-09.B3	Dehesa Hydrologic Subarea
Z-02.I4	Chihuahua Hydrologic Subarea	Z-09.B4	Galloway Hydrologic Subarea
Z-03.00	SAN LUIS REY HYDROLOGIC UNIT	Z-09.B5	Sequan Hydrologic Subarea
Z-03.A0	Bonsall Hydrologic Subunit	Z-09.B6	Alpine Heights Hydrologic Subarea
Z-03.A1	Mission Hydrologic Subarea	Z-09.C0	Upper Sweetwater Hydrologic Subunit
Z-03.A2	Bonsall Hydrologic Subarea	Z-09.C1	Loveland Hydrologic Subarea
Z-03.A3	Moosa Hydrologic Subarea	Z-09.C2	Japatul Hydrologic Subarea
Z-03.A4	Valley Center Hydrologic Subarea	Z-09.C3	Viejas Hydrologic Subarea
Z-03.A5	Woods Hydrologic Subarea	Z-09.C4	Descanso Hydrologic Subarea
Z-03.A6	Rincon Hydrologic Subarea	Z-09.C5	Garnet Hydrologic Subarea
Z-03.B0	Monserate Hydrologic Subunit	Z-10.00	OTAY HYDROLOGIC UNIT
Z-03.B1	Pala Hydrologic Subarea	Z-10.A0	Coronado Hydrologic Subunit
Z-03.B2	Pauma Hydrologic Subarea	Z-10.B0	Otay Hydrologic Subunit
Z-03.B3	San Luis Rey Hydrologic Subarea	Z-10.C0	Dulzura Hydrologic Subunit
Z-03.C0	Warner Hydrologic Subunit	Z-10.C1	Savage Hydrologic Subarea
Z-03.C1	Warner Hydrologic Subarea	Z-10.C2	Proctor Hydrologic Subarea
Z-03.C2	Combs Hydrologic Subarea	Z-10.C3	Jamul Hydrologic Subarea
Z-04.00	CARLSBAD HYDROLOGIC UNIT	Z-10.C4	Lee Hydrologic Subarea
Z-04.A0	Loma Alta Hydrologic Subunit	Z-10.C5	Lyon Hydrologic Subarea
Z-04.B0	Vista Hydrologic Subunit	Z-10.C6	Dulzura Hydrologic Subarea
Z-04.B1	Carlsbad Hydrologic Subarea	Z-10.C7	Engineer Springs Hydrologic Subarea
Z-04.B2	Vista Hydrologic Subarea	Z-11.00	TIA JUANA HYDROLOGIC UNIT
Z-04.C0	Agua Hedionda Hydrologic Subunit	Z-11.A0	Tia Juana Hydrologic Subunit
Z-04.C1	Agua Hedionda Hydrologic Subarea	Z-11.A1	Tia Juana Hydrologic Subarea
Z-04.C2	Buena Hydrologic Subarea	Z-11.A2	San Ysidro Hydrologic Subarea
Z-04.D0	Encinas Hydrologic Subunit	Z-11.B0	Potrero Hydrologic Subunit
Z-04.E0	San Marcos Hydrologic Subunit	Z-11.B1	Marron Hydrologic Subarea
Z-04.E1	Batiquitos Hydrologic Subarea	Z-11.B2	Bee Canyon Hydrologic Subarea
Z-04.E2	San Marcos Hydrologic Subarea	Z-11.B3	Barrett Hydrologic Subarea
Z-04.E3	Twin Oaks Hydrologic Subarea	Z-11.B4	Rough Potrero Hydrologic Subarea
Z-04.F0	Escondido Hydrologic Subunit	Z-11.B5	Potrero Hydrologic Subarea
Z-04.F1	San Elijo Hydrologic Subarea	Z-11.C0	Barrett Lake Hydrologic Subunit
Z-04.F2	Escondido Hydrologic Subarea	Z-11.D0	Monument Hydrologic Subunit
Z-04.F3	Lake Wohlford Hydrologic Subarea	Z-11.D1	Pine Hydrologic Subarea
Z-05.00	SAN DIEGUITO HYDROLOGIC UNIT	Z-11.D2	Monument Hydrologic Subarea
Z-05.A0	San Dieguito Hydrologic Subunit	Z-11.E0	Morena Hydrologic Subunit
Z-05.A1	San Dieguito Hydrologic Subarea	Z-11.F0	Cottonwood Hydrologic Subunit
Z-05.A2	La Jolla Hydrologic Subarea	Z-11.G0	Cameron Hydrologic Subunit
Z-05.B0	Hodges Hydrologic Subunit	Z-11.H0	Campo Hydrologic Subunit
Z-05.B1	Hodges Hydrologic Subarea	Z-11.H1	Tecate Hydrologic Subarea
Z-05.B2	Green Hydrologic Subarea	Z-11.H2	Campo Hydrologic Subarea
Z-05.B3	Felicita Hydrologic Subarea	Z-11.H3	Clover Flat Hydrologic Subarea
Z-05.B4	Bear Hydrologic Subarea	Z-11.H4	Hill Hydrologic Subarea
Z-05.C0	San Pasqual Hydrologic Subunit	Z-11.H5	Hipass Hydrologic Subarea
Z-05.C1	Highland Hydrologic Subarea		
Z-05.C2	San Pasqual Hydrologic Subarea		
Z-05.C3	Reed Hydrologic Subarea		
Z-05.C4	Hidden Hydrologic Subarea		
Z-05.C5	Guejito Hydrologic Subarea		
Z-05.C6	Vineyard Hydrologic Subarea		



**NAMES AND AREAL CODE NUMBERS OF HYDROLOGIC AREAS
SAN DIEGO DRAINAGE PROVINCE (Z)**

TABLE E-1 MINERAL ANALYSES OF GROUND WATER

An explanation of column headings follows:

- TDS - Gravimetric determination of total dissolved solids at 180° Celsius (or *105° C).
- SUM - Total dissolved solids determined by addition of analyzed constituents. ≠ - Difference between total anions and total cations of over five percent.
- EC - The electrical conductance in micromhos at 25° Celsius.
- PH - Measure of acidity or alkalinity of water.
- TH - Total hardness.
- NCH - Non-carbonate hardness.
- TIME - Pacific Standard Time on a 24-hour clock.
- TEMP - Water temperature in degrees Fahrenheit at the time of field sampling.

The MINERAL CONSTITUENTS are as follows:

- | | | | |
|------------------|---------------|------------------|-------------|
| B | - Boron | K | - Potassium |
| CA | - Calcium | MG | - Magnesium |
| CL | - Chloride | NA | - Sodium |
| CO ₃ | - Carbonate | NO ₃ | - Nitrate |
| F | - Fluoride | SIO ₂ | - Silica |
| HCO ₃ | - Bicarbonate | SO ₄ | - Sulfate |

The LAB and SAMPLER agency codes are as follows:

- 1101 - Los Angeles County Flood Control District
- 3102 - Orange County Department of Agriculture
- 4103 - Riverside County Flood Control District
- 4206 - Long Beach Water Department
- 4790 - Babcock and Sons
- 5050 - Department of Water Resources
- 5100 - San Bernardino County Flood Control District
- 5102 - Orange County Flood Control District
- 5867 - Fruit Growers Laboratory
- 5868 - Pomeroy and Associates
- 5999 - Unknown

The COUNTY codes are as follows:

- | | |
|------------------|----------------------|
| 13 - Imperial | 33 - Riverside |
| 14 - Inyo | 36 - San Bernardino |
| 15 - Kern | 90 - San Diego |
| 70 - Los Angeles | 40 - San Luis Obispo |
| 26 - Mono | 42 - Santa Barbara |
| 30 - Orange | 56 - Ventura |

TABLE E-1
MINERAL ANALYSES OF GROUND WATER

SOUTHERN CALIFORNIA

WELL NO. DATE	COUNTY	LAB SAMPLER	TEMP PH	EC	MINERAL CONSTITUENTS IN				MILLIGRAMS PER LITER MILLIEQUIVALENTS PER LITER PERCENT REACTANCE VALUES				MILLIGRAMS PER LITER				TDS 180C (*105C) SUM	TH NCM
					CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SI02		
ASO ROBLES HYDRO SUBUNIT					SALINAS HYDRO UNIT				T0900									
5S/12E-16N01M 10/20/67	40	5050	-- 7.9	832	45 2.24 26	38 3.12 36	75 3.26 38	2 0.05 1	--	284 4.65 54	83 1.73 20	71 2.00 23	17.0 0.27 3	0.4	0.37	--	491 472	269 26
5S/12E-28W01M 10/31/67 1300	40	5050	65 8.0	1277	67 3.34 24	58 4.77 34	134 5.83 41	5 0.13 1	--	278 4.56 33	268 5.58 40	128 3.61 26	2.0 0.03 0	0.4	0.43	--	854 800	406 168
5S/13E-19R01M 10/19/67 1400	40	5050	-- 8.1	528	35 1.75 32	28 2.30 42	33 1.43 26	1 0.02 0	--	227 3.72 68	9 0.19 3	41 1.16 21	25.0 0.40 7	0.6	0.08	--	309 285	203 7
5S/13E-35D01M 08/29/68 1350	40	5050	75 7.9	691	27 1.35 18	40 3.29 44	64 2.78 37	2 0.05 1	--	334 5.47 73	46 0.96 13	39 1.10 15	0.6 0.01 0	0.5	0.42	--	407 384	232 0
5S/14E-10J01M 08/23/68 1330	40	5050	70 7.6	853	101 5.04 44	61 5.02 44	31 1.35 12	4 0.10 1	--	447 7.33 79	16 0.33 4	53 1.49 16	9.6 0.15 2	0.8	0.16	--	482 497*	503 127
5S/14E-11K01M 08/23/68 1410	40	5050	70 8.0	622	31 1.55 22	53 4.36 63	21 0.91 13	3 0.08 1	--	326 5.34 79	17 0.35 5	30 0.85 12	13.2 0.21 3	0.8	0.16	--	359 330	295 18
5S/14E-32L01M 08/07/68 1300	40	5050	69 8.3	389	17 0.85 22	16 1.31 34	39 1.70 44	1 0.02 1	--	129 2.11 56	16 0.33 9	46 1.30 35	0.0 0.00 0	0.5	0.15	--	206 200	108 --
5S/14E-33Q01M 10/31/67 1115	40	5050	64 8.2	583	28 1.40 21	22 1.81 27	75 3.26 50	4 0.10 2	--	289 4.74 73	44 0.92 14	27 0.76 12	3.0 0.05 1	0.6	0.44	--	372 347	161 0
5S/15E-21PS1M 08/07/68 1530	40	5050	70 7.7	625	52 2.59 39	34 2.80 42	29 1.26 19	2 0.05 1	--	200 3.28 49	108 2.25 34	25 0.70 11	24.0 0.39 6	0.6	0.15	--	417 374	270 96
5S/15E-30R01M 08/07/68 1430	40	5050	73 8.0	836	85 4.24 48	35 2.88 33	37 1.61 18	2 0.05 1	--	176 2.88 33	159 3.31 38	54 1.52 17	62.5 1.01 11	0.5	0.20	--	578 522	356 202
5S/15E-32P01M 08/07/68 1500	40	5050	70 8.1	644	63 3.14 46	28 2.30 34	29 1.26 19	2 0.05 1	--	159 2.61 39	135 2.81 42	28 0.79 12	33.0 0.53 8	0.4	0.15	--	464 397	272 132
6S/12E-16NS1M 02/14/68 2000	40	5050	118 7.0	3765	103 5.14 14	3 0.25 1	690 30.01 83	21 0.54 1	--	106 1.74 5	543 11.30 31	814 22.95 64	2.0 0.03 0	5.8	10.80	--	2359 2245	269 173
6S/12E-22P02M 10/31/67 1000	40	5050	71 8.3	695	37 1.85 25	24 1.97 27	79 3.44 47	3 0.08 1	10 0.33 5	260 4.26 59	31 0.64 9	64 1.80 25	12.0 0.19 3	0.3	0.28	--	420 389	191 0
6S/13E-11F01M 10/31/67 1200	40	5050	82 8.0	796	16 0.80 9	8 0.66 8	158 6.87 82	3 0.08 1	--	325 5.33 64	96 2.00 24	33 0.93 11	2.0 0.03 0	0.6	0.90	--	520 478	73 0
6S/13E-11L01M 08/29/68 1325	40	5050	87 8.0	980	14 0.70 7	8 0.66 6	200 8.70 86	2 0.05 0	--	365 5.98 58	160 3.33 33	32 0.90 9	0.4 0.01 0	0.7	1.18	--	641 598	68 0
6S/13E-28L02M 10/31/67 1045	40	5050	65 8.1	558	32 1.60 27	23 1.89 32	52 2.26 39	3 0.08 1	--	246 4.03 68	24 0.50 8	48 1.35 23	2.0 0.03 0	0.2	0.15	--	357 306	175 0
6S/14E-18J01M 10/20/67 830	40	5050	-- 8.2	730	31 1.55 20	15 1.23 16	110 4.78 63	2 0.05 1	--	265 4.34 57	109 2.27 30	35 0.99 13	0.0 0.00 0	0.5	0.56	--	472 434	139 0
6S/14E-35D01M 10/19/67 1300	40	5050	-- 7.9	513	43 2.14 47	7 0.57 13	40 1.74 38	3 0.08 2	--	158 2.59 56	24 0.50 11	46 1.30 28	12.0 0.19 4	0.5	0.05	--	260 254	137 0
6S/15E-02N01M 10/20/67 1000	40	5050	-- 8.1	2159	43 2.14 10	5 0.41 2	428 18.62 88	1 0.02 0	--	311 5.10 24	537 11.18 52	184 5.19 24	2.0 0.03 0	0.5	1.77	--	1396 1356	128 0
08/08/68 1320	40	5050	70 8.2	2111	39 1.95 9	4 0.33 1	435 18.92 89	4 0.10 0	--	308 5.05 23	544 11.33 52	186 5.24 24	2.3 0.04 0	0.6	2.80	--	1369 1370	114 0
6S/15E-20N01M 10/20/67 1100	40	5050	-- 8.2	389	39 1.95 51	4 0.33 8	35 1.52 40	2 0.05 1	--	143 2.34 61	34 0.71 19	20 0.56 15	12.0 0.19 5	0.2	0.06	--	229 217	114 0
6S/15E-28Q02M 10/20/67 1300	40	5050	-- 7.5	4629	427 21.31 36	136 11.18 19	624 27.14 45	4 0.10 0	--	320 5.24 9	1686 35.10 61	622 17.54 30	0.0 0.00 0	0.8	2.40	--	3868 3660	1626 1347
6S/16E-31R01M 10/20/67 1430	40	5050	-- 8.2	1636	37 1.85 11	21 1.73 10	301 13.09 78	2 0.05 0	--	323 5.29 32	365 7.60 46	103 2.90 17	48.0 0.77 5	1.0	2.22	--	1064 1039	179 0

TABLE E-1

MINERAL ANALYSES OF GROUND WATER

SOUTHERN CALIFORNIA

STATE DATE	WELL NO. TIME	COUNTY	LAB SAMPLER	TEMP PH	EC	MINERAL CONSTITUENTS IN				MILLIGRAMS PER LITER MILLIEQUIVALENTS PER LITER PERCENT REACTANCE VALUES				MILLIGRAMS PER LITER				TDS 180C (*105C) SUM	T NCI
						CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SI02		
PASO ROBLES HYDRO SUBUNIT						SALINAS HYDRO UNIT				T0900									
27S/12E-03C02M 10/16/67 1220	40	5050	--	8.0	750	62 3.09 38	37 3.04 38	43 1.87 23	1 0.02 0	--	296 4.85 62	16 0.33 4	88 2.48 32	8.0 0.13 2	0.3	0.05	--	424 401	30 4
27S/12E-29P02M 10/11/67 1400	40	5050	--	7.8	982	110 5.49 48	42 3.45 30	48 2.09 18	15 0.38 3	--	251 4.11 38	232 4.83 45	61 1.72 16	3.5 0.06 0	0.3	0.06	--	675 636*	44 22
27S/13E-09P01M 10/28/67 930	40	5050	68	8.3	637	16 0.80 11	8 0.66 9	132 5.74 79	3 0.08 1	16 0.53 8	315 5.16 74	23 0.48 7	25 0.70 10	6.0 0.10 1	0.1	0.28	--	424 385	7
27S/13E-36R01M 11/07/67 915	40	5050	68	8.1	489	60 2.99 60	10 0.82 16	26 1.13 23	2 0.05 1	--	200 3.28 66	18 0.37 8	37 1.04 21	16.0 0.26 5	0.5	0.00	--	318 268	19
27S/15E-13A01M 11/07/67 1045	40	5050	--	8.0	4237	172 8.58 19	66 5.43 12	736 32.01 69	6 0.15 0	--	263 4.31 10	863 17.97 40	785 22.14 49	27.5 0.44 1	1.0	2.90	--	2881 2789	70 45
27S/16E-23N01M 11/07/67 1115	40	5050	62	8.4	725	39 1.95 27	4 0.33 5	111 4.83 67	4 0.10 1	14 0.47 6	239 3.92 53	64 1.33 18	52 1.47 20	10.0 0.16 2	0.9	0.46	--	435 417	11
28S/12E-10R02M 10/12/67 --	40	5050	--	8.2	907	88 4.39 45	45 3.70 38	39 1.70 17	2 0.05 0	--	318 5.21 53	128 2.66 27	67 1.89 19	3.0 0.05 0	0.3	0.05	--	519 529	40 12
28S/13E-31R02M 10/11/67 1040	40	5050	--	8.0	979	87 4.34 39	57 4.69 42	46 2 18	2 0.05 0	--	402 6.59 61	136 2.83 26	50 1.41 13	1.0 0.02 0	0.5	0.04	--	565 578	45 9
30S/18E-01802M 11/04/67 1600	40	5050	72	8.3	2531	124 6.19 22	38 3.12 11	435 18.92 67	2 0.05 0	7 0.23 1	193 3.16 11	735 15.30 56	258 7.27 27	87.0 1.40 5	0.9	1.17	--	1848 1783	46 29
POZO HYDRO SUBUNIT						SAN LUIS OBISPO HYDRO UNIT				T1000									
CAMBRIA HYDRO SUBUNIT						SAN CARPOFORO HYDRO SUBAREA				T10A0									
30S/15E-10G02M 11/04/67 1100	40	5050	72	7.9	802	82 4.09 49	16 1.31 16	64 2.76 34	4 0.10 1	--	121 1.98 24	216 4.50 55	61 1.72 21	0.0 0.00 0	0.2	0.03	--	535 503	27 16
30S/15E-21C01M 11/04/67 1015	40	5050	61	7.6	703	58 2.89 38	35 2.88 38	41 1.78 23	1 0.02 0	--	219 3.59 47	141 2.93 39	23 0.65 9	25.0 0.40 5	0.5	0.12	--	464 433	28 9
SAN SIMEON HYDRO SUBAREA						T10A3													
27S/08E-26C05M 11/16/67 --	40	5050	--	7.7	1069	89 4.44 35	75 6.17 48	49 2.13 17	1 0.02 0	--	514 8.42 68	124 2.58 21	50 1.41 11	3.0 0.05 0	0.5	0.21	--	642 645	51 8
SANTA ROSA HYDRO SUBAREA						T10A4													
27S/08E-21R03M 11/11/67 1200	40	5050	58	8.3	1099	41 2.04 17	84 6.91 56	74 3.22 26	6 0.15 1	14 0.47 4	418 6.85 56	95 1.98 16	107 3.02 24	0.0 0.00 0	0.4	0.20	--	635 628	44 8
27S/08E-26D01M 11/16/67 --	40	5050	--	7.8	1173	97 4.84 36	79 6.50 48	51 2.22 16	1 0.02 0	--	535 8.77 66	119 2.48 18	73 2.06 15	3.8 0.06 0	0.5	0.16	--	717 688	50 10
VILLA HYDRO SUBAREA						T10A5													
28S/09E-26E01M 11/11/67 1315	40	5050	63	8.2	1692	43 2.14 12	84 6.91 39	197 8.57 48	1 0.02 0	--	323 5.29 31	71 1.48 9	293 8.26 48	135.0 2.18 13	0.6	1.00	--	994 985	41 1
CAYUCOS HYDRO SUBAREA						T10A6													
28S/10E-31F01M 11/11/67 1330	40	5050	70	8.4	1503	45 2.24 14	66 5.43 35	182 7.92 51	0 0.00 0	23 0.77 5	368 6.03 39	47 0.98 6	263 7.42 48	18.0 0.29 2	1.0	0.23	--	842 827	3
28S/10E-32A04M 11/11/67 1345	40	5050	64	8.6	1428	17 0.85 5	103 8.47 53	153 6.65 41	5 0.13 1	37 1.23 8	503 8.24 51	63 1.31 8	185 5.22 33	1.0 0.02 0	0.5	0.21	--	803 812	4

TABLE E-1
MINERAL ANALYSES OF GROUND WATER

SOUTHERN CALIFORNIA

STATE WELL NO. DATE	COUNTY	LAB SAMPLER	TEMP PH	EC	MINERAL CONSTITUENTS IN				MILLIGRAMS PER LITER MILLIEQUIVALENTS PER LITER PERCENT REACTANCE VALUES				MILLIGRAMS PER LITER				TDS 180C (*105C) SUM	TH MCM	
					CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SiO2			
SAN LUIS OBISPO HYDRO UNIT					T1000														
SAMBRIA HYDRO SUBUNIT					T10A0														
TORO HYDRO SUBAREA					T10A8														
95/11E-06L01M	40	5050	62	790	58	64	33	0	37	351	70	35	1.0	0.6	0.08	--	460	408	
11/17/67	1000	--	8.6		2.89	5.26	1.43	0.00	1.23	5.75	1.46	0.99	0.02				472	59	
					30	55	15	0	13	61	15	10	0						
SAN LUIS OBISPO HYDRO SUBUNIT					T1080														
CHORRO HYDRO SUBAREA					T1082														
95/10E-25C02M	40	5050	--	1084	79	79	49	1	--	481	84	91	4.0	0.4	0.09	--	642	522	
11/06/67	930	--	7.8		3.94	6.50	2.13	0.02		7.88	1.75	2.57	0.06				624	66	
					31	52	17	0		64	14	21	0						
95/10E-25E02M	40	5050	--	1025	62	58	79	1	21	357	67	115	2.0	0.4	0.08	--	581	393	
11/06/67	845	--	8.5		3.09	4.77	3.44	0.02	0.70	5.85	1.39	3.24	0.03				581	66	
					27	42	30	0	6	52	12	29	0						
95/11E-32J04M	40	5050	--	1078	48	88	52	1	--	512	42	89	2.5	0.6	0.07	--	594	482	
11/06/67	900	--	8.1		2.39	7.24	2.26	0.02		8.39	0.87	2.51	0.04				575	27	
					20	61	19	0		71	7	21	0						
95/11E-32M01M	40	5050	60	1694	50	137	130	3	26	536	115	261	7.5	0.2	0.12	--	1082	689	
11/02/67	--	--	8.4		2.49	11.27	5.65	0.08	0.87	8.78	2.39	7.36	0.12				994	206	
					13	58	29	0	4	45	12	38	1						
LOS OSOS HYDRO SUBAREA					T1083														
95/10E-13B02M	40	5050	58	187	10	5	23	1	--	41	6	33	2.0	0.0	0.02	--	101	45	
11/02/67	1315	--	7.8		0.50	0.41	1	0.02		0.67	0.12	0.93	0.03				101#	0	
					26	21	52	1		38	7	53	2						
95/10E-13L01M	40	5050	64	198	6	6	23	1	--	36	20	35	6.0	0.0	0.00	--	141	40	
11/02/67	1330	--	7.1		0.30	0.49	1	0.02		0.59	0.42	0.99	0.10				115#	0	
					16	27	55	1		28	20	47	5						
95/11E-07G03M	40	5050	65	171	8	4	17	1	--	21	4	34	8.0	0.0	0.00	--	111	36	
11/02/67	1500	--	7.5		0.40	0.33	0.74	0.02		0.34	0.08	0.96	0.13				87	0	
					27	22	49	2		23	5	63	8						
95/11E-07N01M	40	5050	62	242	12	9	22	1	--	74	5	35	3.0	0.0	0.00	--	151	67	
11/02/67	--	--	7.5		0.60	0.74	0.96	0.02		1.21	0.10	0.99	0.05				124	0	
					26	32	41	1		52	4	42	2						
95/11E-07Q01M	40	5050	60	214	9	7	21	1	--	34	8	34	21.0	0.0	0.00	--	166	51	
11/02/67	--	--	7.3		0.45	0.57	0.91	0.02		0.56	0.17	0.96	0.34				118	0	
					23	29	46	1		28	8	47	17						
95/11E-08J01M	40	5050	63	3030	120	140	317	2	--	391	95	790	73.0	1.2	0.44	--	2126	876	
11/02/67	--	--	7.8		5.99	11.51	13.79	0.05		6.41	1.98	22.28	1.18				1731	512	
					19	37	44	0		20	6	70	4						
95/11E-08R01M	40	5050	68	1051	44	79	72	3	--	531	4	101	3.0	0.2	0.11	--	586	435	
11/02/67	--	--	8.2		2.19	6.50	3.13	0.08		8.70	0.08	2.85	0.05				568	0	
					18	55	26	1		74	1	24	0						
95/11E-18M01M	40	5050	62	220	9	7	17	1	--	45	5	33	8.0	0.0	0.00	--	176	51	
11/02/67	--	--	7.8		0.45	0.57	0.74	0.02		0.74	0.10	0.93	0.13				103#	0	
					25	32	41	1		39	5	49	7						
95/11E-18K01M	40	5050	62	170	8	4	18	1	--	41	3	26	7.0	0.2	0.00	--	113	36	
11/02/67	--	--	7.4		0.40	0.33	0.78	0.02		0.67	0.06	0.73	0.11				88	0	
					26	21	51	2		42	4	46	7						
95/11E-18Q01M	40	5050	64	277	10	9	31	0	--	36	10	48	0.0	0.0	0.04	--	185	62	
11/02/67	1245	--	7.9		0.50	0.74	1.35	0.00		0.59	0.21	1.35	0.00				126#	0	
					19	29	52	0		27	10	63	0						
95/11E-25Q01M	40	5050	--	626	43	33	40	1	--	325	10	36	1.8	0.3	0.22	--	357	243	
06/13/68	--	--	7.4		2.14	2.71	1.74	0.02		5.33	0.21	1.01	0.03				326	0	
					32	41	26	0		81	3	15	0						
SAN LUIS OBISPO CR HYDRO SUBAREA					T1084														
95/12E-30L01M	40	5050	--	1195	88	65	52	1	--	348	16	192	30.0	0.4	0.00	--	872	487	
06/14/68	--	--	7.5		4.39	5.34	2.26	0.02		5.70	0.33	5.41	0.48				616	158	
					36	44	19	0		48	3	45	4						
95/12E-32J01M	40	5050	70	932	49	56	58	0	--	361	16	111	11.3	0.5	0.08	--	564	353	
06/13/68	--	--	7.2		2.44	4.60	2.52	0.00		5.92	0.33	3.13	0.18				480	13	
					25	48	26	0		62	3	33	2						
95/12E-01N03M	40	5050	--	1211	40	116	43	0	--	537	63	103	18.2	0.4	0.04	--	771	577	
06/14/68	--	--	7.2		1.99	9.54	1.87	0.00		8.80	1.31	2.90	0.29				648	93	
					15	71	14	0		66	10	22	2						
95/12E-10L01M	40	5050	--	913	48	77	32	1	--	452	38	59	9.0	0.3	0.12	--	538	437	
06/14/68	--	--	7.7		2.39	6.33	1.39	0.02		7.41	0.79	1.66	0.14				487	23	
					24	62	14	0		74	8	17	1						
95/12E-12O99M	40	5050	--	1362	45	111	96	1	--	513	52	190	49.0	0.4	0.04	--	950	569	
02/08/68	1700	--	7.3		2.24	9.13	4.17	0.02		8.41	1.08	5.36	0.79				797	105	
					14	59	27	0		54	7	34	5						

TABLE E-1
MINERAL ANALYSES OF GROUND WATER

SOUTHERN CALIFORNIA

STATE WELL NO. DATE	COUNTY	LAB SAMPLER	TEMP PH	EC	MINERAL CONSTITUENTS IN	MILLIGRAMS PER LITER MILLIEQUIVALENTS PER LITER PERCENT REACTANCE VALUES							MILLIGRAMS PER LITER				TDS 180C (*105C) SUM	T NCI
						CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B		
SAN LUIS OBISPO HYDRO SUBUNIT T1080 SAN LUIS OBISPO CR HYDRO SUBAREA T1084					SAN LUIS OBISPO HYDRO UNIT T1000													
31S/12E-12E03M 06/14/68 --	40	5050	--	2164	72 3.59 15	181 14.88 63	118 5.13 22	1 0.02 0	--	735 12.05 51	77 1.60 7	284 8.01 34	125.0 2.02 8	0.3	0.11	--	1517 1220	92 27
31S/12E-16001M 06/21/68 915	40	5050	--	661	26 1.30 17	72 5.92 76	13 0.56 7	1 0.02 0	--	420 6.88 87	10 0.21 3	27 0.76 10	2.0 0.03 0	0.2	0.05	--	444 358	36
31S/12E-29L01M 06/21/68 1000	40	5050	--	880	71 3.54 34	58 4.77 46	46 2 19	3 0.08 1	--	475 7.78 75	77 1.60 15	33 0.93 9	2.0 0.03 0	0.6	0.08	--	624 525	41
31S/12E-32H01M 06/21/68 1015	40	5050	--	831	10 0.50 6	5 0.41 5	168 7.31 82	27 0.69 8	--	339 5.56 62	76 1.58 18	61 1.72 19	6.0 0.10 1	0.2	0.40	--	577 521	4
31S/12E-33E02M 06/21/68 1030	40	5050	--	1117	61 3.04 23	72 5.92 45	90 3.91 30	12 0.31 2	--	536 8.78 66	97 2.02 15	87 2.45 18	1.0 0.02 0	0.2	0.13	--	770 684	44
31S/13E-07M01M 06/20/68 900	40	5050	--	549	28 1.40 25	41 3.37 60	20 0.87 15	0 0.00 0	--	195 3.20 58	22 0.46 8	54 1.52 28	21.5 0.35 6	0.2	0.05	--	278 283	23 3
31S/13E-18D01M 06/20/68 --	40	5050	--	1667	73 3.64 22	90 7.40 44	129 5.61 34	2 0.05 0	--	223 3.65 22	15 0.31 2	450 12.69 76	8.0 0.13 1	0.5	0.02	--	1349 878	55 32
PISMO HYDRO SUBAREA T1086																		
31S/13E-16N01M 06/20/68 1020	40	5050	--	749	59 2.94 34	57 4.69 54	24 1.04 12	0 0.00 0	--	380 6.23 73	69 1.44 17	29 0.82 9	5.5 0.09 1	0.4	0.14	--	411 431	38 2
31S/13E-19H02M 06/21/68 1130	40	5050	--	1121	41 2.04 16	116 9.54 73	33 1.43 11	2 0.05 0	--	515 8.44 65	98 2.04 16	55 1.55 12	62.0 1 8	0.4	0.09	--	850 661	58 11
31S/13E-20D01M 06/20/68 1000	40	5050	--	783	44 2.19 24	61 5.02 56	38 1.65 18	3 0.08 1	--	399 6.54 73	71 1.48 16	33 0.93 10	3.0 0.05 0	0.3	0.08	--	416 450	36
31S/13E-27R01M 06/20/68 1100	40	5050	--	1100	69 3.44 29	82 6.74 58	35 1.52 13	0 0.00 0	--	315 5.16 45	58 1.21 11	93 2.62 23	150.0 2.42 21	0.4	0.09	--	633 643	51 20
31S/13E-29E01M 06/20/68 1430	40	5050	--	1715	131 6.54 30	153 12.58 57	67 2.91 13	0 0.00 0	--	860 14.09 63	275 5.72 26	73 2.06 9	26.5 0.43 2	0.7	0.24	--	1227 1150	95 20
31S/13E-31J01M 06/20/68 1400	40	5050	--	1012	94 4.69 39	58 4.77 39	60 2.61 22	1 0.02 0	--	580 9.51 77	38 0.79 6	69 1.94 16	1.0 0.02 0	0.3	0.22	--	693 607	47
32S/12E-01J01M 10/04/67 1600	40	5050	68	918	40 1.99 21	48 3.95 41	82 3.57 37	3 0.08 1	--	322 5.28 56	59 1.23 13	95 2.68 28	13.5 0.22 2	0.6	0.27	--	554 500	29
32S/13E-06M01M 06/21/68 1100	40	5050	--	2079	21 1.05 4	56 4.60 20	391 17.01 73	20 0.51 2	0 0.00 0	992 16.26 70	2 0.04 0	242 6.82 29	0.0 0.00 0	0.6	3.95	--	1280 1225	28
ARROYO GRANDE HYDRO SUBUNIT T10C0 ARROYO GRANDE HYDRO SUBAREA T10C1																		
32S/13E-01G01M 06/20/68 1115	40	5050	--	934	101 5.04 45	56 4.60 41	32 1.39 12	2 0.05 0	--	450 7.37 66	132 2.75 25	34 0.96 9	0.5 0.01 0	0.5	0.09	--	578 580	48 11
32S/13E-14R02M 06/20/68 1200	40	5050	--	1110	89 4.44 35	65 5.34 42	67 2.91 23	4 0.10 1	--	547 8.96 69	116 2.41 19	55 1.55 12	1.0 0.02 0	0.4	0.28	--	682 667	49 4
32S/13E-15K01M 06/20/68 1320	40	5050	--	776	36 1.80 26	18 1.48 22	79 3.44 51	3 0.08 1	--	52 0.85 12	46 0.96 14	175 4.93 71	12.0 0.19 3	0.5	0.03	--	571 396	16 12
32S/13E-22C01M 06/20/68 1300	40	5050	--	376	14 0.70 21	8 0.66 19	45 1.96 58	2 0.05 1	--	95 1.56 46	15 0.31 9	54 1.52 45	1.0 0.02 0	0.9	0.19	--	276 187	6
32S/13E-22R01M 06/20/68 1230	40	5050	--	2014	234 11.68 43	141 11.59 43	80 3.48 13	6 0.15 1	--	714 11.70 44	567 11.80 44	115 3.24 12	1.5 0.02 0	0.6	0.14	--	1666 1497	116 57
32S/13E-23F01M 06/20/68 1215	40	5050	--	1941	213 10.63 44	122 10.03 41	83 3.61 15	3 0.08 0	--	637 10.44 42	518 10.78 43	126 3.55 14	0.5 0.01 0	0.5	0.19	--	1544 1380	103 51
32S/13E-27D03M 06/20/68 1300	40	5050	--	2225	276 13.77 47	131 10.77 37	108 4.70 16	4 0.10 0	--	628 10.29 35	734 15.28 52	126 3.55 12	1.5 0.02 0	0.6	0.14	--	1918 1690	122 71

TABLE E-1
MINERAL ANALYSES OF GROUND WATER
SOUTHERN CALIFORNIA

WELL NO. DATE	COUNTY	LAB SAMPLER	TEMP PH	EC	MINERAL CONSTITUENTS IN										MILLIGRAMS PER LITER				TDS 180C (*105C) SUM	TH NCH
					SAN LUIS OBISPO HYDRO UNIT				T1000						MILLIEQUIVALENTS PER LITER					
					CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SI02				
ARROYO GRANDE HYDRO SUBUNIT					T10C0															
NIPOMO MESA HYDRO SUBAREA					T10C2															
42/35W-140015	42	5050	65	1700	128	98	100	4	4	277	533	86	41.0	0.5	0.20	--	1260	723		
5/03/68 1330	--	--	8.4		6.39	8.06	4.35	0.10	0.13	4.54	11.10	2.42	0.66				1131	489		
					34	43	23	0	1	24	59	13	3							
CARRIZO PLAIN HYDRO UNIT					T1100															
40/26W-02G01S	40	5050	63	3095	65	24	625	3	9	214	792	384	26.0	0.9	1.50	--	2089	261		
1/04/67 1345	--	--	8.4		3.24	1.97	27.19	0.08	0.30	3.51	16.49	10.83	0.42				2036	70		
					10	6	84	0	1	11	52	34	1							
40/17E-13R01M	40	5050	64	886	41	12	131	1	--	160	117	84	74.0	0.8	0.51	--	567	152		
1/04/67 1615	--	--	7.8		2.04	0.99	5.70	0.02	--	2.62	2.43	2.37	1.19				540	5		
					23	11	65	0		30	28	27	14							
40/18E-28L01M	40	5050	62	1123	72	16	148	1	--	167	239	74	87.0	0.6	0.59	--	727	246		
1/04/67 1600	--	--	8.2		3.59	1.31	6.44	0.02	--	2.74	4.97	2.09	1.40				721	94		
					32	12	57	0		24	44	19	12							
40/21E-18A01M	40	5050	61	4115	672	151	393	6	--	62	2824	70	0.0	1.9	0.97	--	4576	2299		
1/04/67 1300	--	--	7.3		33.53	12.42	17.09	0.15	--	1.02	58.79	1.97	0.00				4150	2233		
					53	20	27	0		2	95	3	0							
SANTA MARIA-CUYAHA HYDRO UNIT					T12A0															
42/33W-06G01S	42	5050	64	959	90	53	49	2	0	239	289	28	4.5	0.5	0.12	--	616	443		
9/19/68 1045	--	--	8.1		4.49	4.36	2.13	0.05	0.00	3.92	6.02	0.79	0.07				634	247		
					41	39	19	0	0	36	56	7	1							
42/33W-18R01S	42	5050	--	811	61	17	71	3	0	164	53	117	23.0	0.3	0.00	--	471	222		
5/07/68 1430	--	--	8.3		3.04	1.40	3.09	0.08	0.00	2.69	1.10	3.30	0.37				426	88		
					40	18	41	1	0	36	15	44	5							
42/33W-18R01S	42	5050	--	768	61	17	66	3	0	167	58	111	20.0	0.4	0.05	--	493	222		
9/19/68 1015	--	--	7.2		3.04	1.40	2.87	0.08	0.00	2.74	1.21	3.13	0.32				419	85		
					41	19	39	1	0	37	16	42	4							
42/34W-08H04S	42	5050	68	966	85	40	56	2	6	220	239	40	5.8	0.2	0.10	--	644	377		
5/03/68 1440	--	--	8.5		4.24	3.29	2.43	0.05	0.20	3.60	4.97	1.13	0.09				583	186		
					42	33	24	0	2	36	50	11	1							
42/34W-08H04S	42	5050	65	676	27	17	74	3	0	52	57	133	16.3	0.3	0.03	--	426	137		
9/20/68 1400	--	--	7.0		1.35	1.40	3.22	0.08	0.00	0.85	1.19	3.75	0.26				354	95		
					22	23	53	1	0	14	20	62	4							
42/33W-20F01S	42	5050	65	1480	135	65	101	4	4	249	503	48	22.0	0.4	0.20	--	1070	605		
5/02/68 1520	--	--	8.4		6.74	5.34	4.39	0.10	0.13	4.08	10.47	1.35	0.35				1005	394		
					41	32	26	1	1	25	64	8	2							
42/34W-17F01S	42	5050	64	1940	200	93	118	5	0	282	718	78	49.0	0.5	0.20	--	1480	882		
5/03/68 1100	--	--	8.2		9.98	7.65	5.13	0.13	0.00	4.62	14.95	2.20	0.79				1401	651		
					44	33	22	1	0	20	66	10	3							
42/34W-17F01S	42	5050	64	1844	202	91	113	4	0	274	727	76	50.8	0.9	0.20	--	1528	879		
9/19/68 1355	--	--	7.9		10.08	7.48	4.91	0.10	0.00	4.49	15.14	2.14	0.82				1400	654		
					45	33	22	0	0	20	67	9	4							
42/34W-18L01S	42	5050	--	2300	195	62	240	9	0	350	521	284	55.5	0.8	0.42	--	1643	742		
9/19/68 1415	--	--	7.7		9.73	5.10	10.44	0.23	0.00	5.74	10.85	8.01	0.89				1540	455		
					38	20	41	1	0	22	43	31	3							
42/34W-18P01S	42	5050	--	1930	203	63	92	5	4	149	597	120	55.0	0.4	0.20	--	1420	766		
5/03/68 1120	--	--	8.4		10.13	5.18	4.00	0.13	0.13	2.44	12.43	3.38	0.89				1213	637		
					52	27	21	1	1	13	64	17	5							
42/34W-18P01S	42	5050	--	1807	181	84	117	4	0	265	610	112	55.5	0.7	0.23	--	1309	798		
9/19/68 1435	--	--	7.9		9.03	6.91	5.09	0.10	0.00	4.34	12.70	3.16	0.89				1295	580		
					43	33	24	0	0	21	60	15	4							
42/34W-34E02S	42	5050	68	982	91	48	50	3	4	239	275	25	3.1	0.2	0.10	--	664	425		
5/02/68 1600	--	--	8.4		4.54	3.95	2.17	0.08	0.13	3.92	5.72	0.70	0.05				617	222		
					42	37	20	1	1	37	54	7	0							
42/34W-34E02S	42	5050	68	900	84	43	46	3	0	218	264	27	3.7	0.4	0.07	--	676	387		
9/19/68 1325	--	--	8.1		4.19	3.54	2	0.08	0.00	3.57	5.50	0.76	0.06				579	208		
					43	36	20	1	0	36	56	8	1							
40/35W-04C01S	40	5050	63	1960	224	95	109	4	0	345	752	73	17.0	0.4	0.20	--	1600	950		
5/03/68 1250	--	--	8.3		11.18	7.81	4.74	0.10	0.00	5.65	15.66	2.06	0.27				1445	667		
					47	33	20	0	0	24	66	9	1							
40/35W-04C01S	40	5050	63	1886	223	94	100	4	0	339	741	73	16.3	0.8	0.20	--	1542	944		
9/20/68 1110	--	--	7.6		11.13	7.73	4.35	0.10	0.00	5.56	15.43	2.06	0.26				1419	666		
					48	33	19	0	0	24	66	9	1							
42/35W-07F01S	42	5050	65	2200	250	113	110	5	0	310	841	124	6.7	0.3	0.20	--	1760	1089		
5/03/68 1340	--	--	8.2		12.47	9.29	4.78	0.13	0.00	5.08	17.51	3.50	0.11				1603	835		
					47	35	18	0	0	19	67	13	0							

TABLE E-1
MINERAL ANALYSES OF GROUND WATER

SOUTHERN CALIFORNIA

STATE WELL NO. DATE	COUNTY	LAB SAMPLER	TEMP PH	EC	MINERAL CONSTITUENTS IN										MILLIGRAMS PER LITER				TDS 180C (*105C) SUM	T NO
					MILLIEQUIVALENTS PER LITER					PERCENT REACTANCE VALUES					MILLIGRAMS PER LITER					
					CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SI02				
					SANTA MARIA-CUYAMA HYDRO UNIT										T1200					
SANTA MARIA HYDRO SUBUNIT					T12A0															
10N/35W-09N015 09/20/68 --	42	5050	--	1077	109 5.44 45	51 4.19 34	57 2.48 20	3 0.08 1	0 0.00 0	240 3.93 33	333 6.93 57	39 1.10 9	5.5 0.09 1	0.4	0.10	--	797 716	48 28		
10N/35W-09N025 09/20/68 1300	42	5050	64	1380	141 7.03 45	64 5.26 33	77 3.35 21	3 0.08 0	0 0.00 0	238 3.90 25	482 10.03 64	59 1.66 10	10.3 0.17 1	0.6	0.14	--	1062 955	61 42		
10N/35W-14D015 09/20/68 1215	42	5050	65	1633	170 8.48 45	72 5.92 31	102 4.44 23	4 0.10 0	-- 4.82 25	294 11.10 58	533 2.42 13	86 40.0 0.64 3	0.8	0.20	--	1242 1153	72 48			
10N/35W-21C015 05/03/68 1305	42	5050	65	1930	160 7.98 38	82 6.74 32	146 6.35 30	4 0.10 0	0 0.00 0	366 6.00 29	484 10.08 48	148 4.17 20	46.0 0.74 3	0.2	0.20	--	1380 1251	73 43		
09/20/68 1315	42	5050	65	1728	135 6.74 34	80 6.58 34	140 6.09 31	4 0.10 0	0 0.00 0	327 5.36 28	446 9.28 48	146 4.12 21	40.0 0.64 3	0.5	0.20	--	1240 1153	66 35		
10N/35W-24B025 05/03/68 1415	42	5050	65	1660	160 7.98 44	72 5.92 32	97 4.22 23	4 0.10 1	0 0.00 0	306 5.01 27	489 10.18 56	80 2.26 12	48.0 0.77 4	0.4	0.20	--	1210 1102	65 44		
09/20/68 1330	42	5050	65	1417	134 6.69 41	70 5.76 35	87 3.78 23	3 0.08 0	0 0.00 0	280 4.59 28	440 9.16 56	70 1.97 12	40.0 0.64 4	0.7	0.14	--	1057 983	62 35		
11N/34W-270015 07/31/68 1145	40	5050	--	752	36 1.80 24	22 1.81 24	87 3.78 51	2 0.05 1	-- 3.23 43	69 1.44 19	80 2.26 30	32.0 0.52 7	0.2	0.04	--	405 426	18 1			
11N/34W-29P025 09/20/68 950	42	5050	65	1526	118 5.89 46	49 4.03 32	64 2.78 22	2 0.05 0	0 0.00 0	234 3.83 31	276 5.75 46	69 1.94 16	60.0 0.97 8	0.5	0.11	--	848 754	49 30		
11N/35W-18M015 05/03/68 1215	40	5050	--	1420	143 7.13 42	74 6.08 36	81 3.52 21	5 0.13 1	0 0.00 0	223 3.65 23	520 10.83 68	47 1.32 8	0.4 0.01 0	0.1	0.10	--	1090 981	66 47		
09/20/68 1020	40	5050	--	1350	147 7.33 46	61 5.02 31	82 3.57 22	4 0.10 1	0 0.00 0	229 3.75 24	521 10.85 68	45 1.27 8	0.5 0.01 0	0.4	0.16	--	1110 974	63 42		
11N/35W-19E025 05/03/68 1230	40	5050	67	1290	129 6.44 45	53 4.36 30	81 3.52 24	4 0.10 1	5 0.17 1	240 3.93 28	423 8.81 62	44 1.24 9	2.9 0.05 0	0.2	0.10	--	927 861	54 33		
11N/35W-26M015 05/03/68 1200	40	5050	63	952	105 5.24 53	27 2.22 22	55 2.39 24	2 0.05 0	9 0.30 3	169 2.77 29	244 5.08 52	44 1.24 13	19.0 0.31 3	0.3	0.10	--	661 589	37 27		
11N/35W-33F015 05/03/68 1245	40	5050	65	2110	250 12.47 50	94 7.73 31	106 4.61 18	5 0.13 0	0 0.00 0	514 8.42 34	655 13.64 55	93 2.62 11	7.5 0.12 0	0.3	0.30	--	1590 1464	101 58		
11N/36W-13R015 05/03/68 1220	40	5050	--	1340	135 6.74 45	58 4.77 32	80 3.48 23	4 0.10 1	0 0.00 0	249 4.08 27	460 9.58 64	41 1.16 8	2.2 0.03 0	0.2	0.10	--	1000 903	57 37		
09/20/68 1030	40	5050	--	1290	127 6.34 44	59 4.85 33	75 3.26 22	3 0.08 0	-- 3.98 27	243 9.58 65	460 1.13 8	40 0.02 0	1.5 0.02 0	0.4	0.15	--	1002 886	50 30		
SISQUOC HYDRO SUBUNIT					T12B0															
09N/30W-33M015 04/30/68 1025	42	5050	--	796	34 1.70 19	72 5.92 68	25 1.09 12	2 0.05 1	56 1.87 22	318 5.21 60	20 0.42 5	36 1.01 12	6.5 0.10 1	0.2	0.10	--	429 409	31 7		
09N/33W-12R015 05/02/68 1500	42	5050	--	1220	105 5.24 38	68 5.59 41	62 2.70 20	3 0.08 1	0 0.00 0	289 4.74 35	364 7.58 56	29 0.82 6	18.0 0.29 2	0.3	0.10	--	863 792	50 30		
09/19/68 1110	42	5050	65	1141	106 5.29 40	65 5.34 40	59 2.57 19	3 0.08 1	0 0.00 0	284 4.65 35	362 7.54 57	28 0.79 6	19.8 0.32 2	0.5	0.14	--	868 784	52 29		
CUYAMA VALLEY HYDRO SUBUNIT					T12C0															
07N/23W-15R015 10/30/67 1045	56	5050	63	2557	362 18.06 49	165 13.57 37	117 5.09 14	4 0.10 0	-- 2.98 8	182 33.48 91	1608 0.37 1	13 0.03 0	2.0 0.03 0	1.7	0.19	--	2619 2363	151 --		
09/23/68 945	42	5050	--	2639	375 18.71 50	168 13.82 37	114 4.96 13	4 0.10 0	0 0.00 0	178 2.92 8	1613 33.58 91	9 0.25 1	1.4 0.02 0	1.5	0.24	--	2507 2374	16 14		
07N/23W-16L015 10/30/67 1030	56	5050	62	2202	311 15.52 51	131 10.77 35	95 4.13 13	4 0.10 0	-- 3.33 11	203 27.11 88	1302 0.37 1	13 0.03 0	2.0 0.03 0	1.5	0.15	--	2128 1960	13 11		

TABLE E-1
MINERAL ANALYSES OF GROUND WATER
SOUTHERN CALIFORNIA

WELL NO. DATE	COUNTY	LAB TIME	TEMP SAMPLER PH	EC	MILLIGRAMS PER LITER										TDS 180C (*105C) SUM	TH NCH		
					MINERAL CONSTITUENTS IN				MILLIEQUIVALENTS PER LITER				PERCENT REACTANCE VALUES				MILLIGRAMS PER LITER	
					CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F			B	SI02
YAMA VALLEY HYDRO SUBUNIT T1200					SANTA MARIA-CUYAMA HYDRO UNIT T1200													
N/23W-19H015 0/30/67 1130	56	5050	-- 7.8	1782	207 10.33 45	101 8.31 36	94 4.09 18	2 0.05 0	--	232 3.80 16	894 18.61 81	20 0.56 2	0.0 0.00 0	1.0	0.19	--	1566 1434	932 742
4/25/68 1645	56	5050	-- 8.5	1680	204 10.18 59	55 4.52 26	57 2.48 14	3 0.08 0	4 0.13 1	132 2.16 13	691 14.39 84	18 0.51 3	0.0 0.00 0	1.0	0.10	--	1330 1098	736 621
9/23/68 930	42	5050	-- 7.6	1599	205 10.23 50	84 6.91 34	71 3.09 15	3 0.08 0	--	317 5.19 26	693 14.43 72	17 0.48 2	0.5 0.01 0	0.9	0.18	--	1174 1231	858 591
N/24W-01L015 1/02/67 1220	56	5050	-- 8.1	2386	29 1.45 6	0 0.00 0	497 21.62 92	12 0.31 1	--	287 4.70 20	522 10.87 46	272 7.67 33	8.0 0.13 0	0.8	1.40	--	1454 1484	72 0
N/24W-13C025 0/30/67 1200	56	5050	66 7.9	1912	240 11.98 47	117 9.62 38	89 3.87 15	3 0.08 0	--	196 3.21 12	1078 22.44 86	17 0.48 2	0.0 0.00 0	1.1	0.20	--	1740 1642	1081 913
N/24W-06R025 0/31/67 1100	42	5050	60 8.1	1748	232 11.58 52	89 7.32 33	76 3.30 15	3 0.08 0	--	179 2.93 13	920 19.15 84	19 0.53 2	3.0 0.05 0	1.1	0.15	--	1521 1432	946 792
N/24W-16A015 1/02/67 1330	56	5050	69 8.5	826	8 0.40 5	13 1.07 13	157 6.83 82	2 0.05 1	12 0.40 5	345 5.65 67	66 1.37 16	33 0.93 11	2.0 0.03 0	1.2	0.94	--	432 465	73 0
N/24W-21F015 0/30/67 1230	42	5050	60 8.0	1712	219 10.93 50	90 7.40 34	79 3.44 16	3 0.08 0	--	184 3.01 14	896 18.65 84	16 0.45 2	2.0 0.03 0	1.1	0.15	--	1447 1397	917 746
9/23/68 1020	42	5050	-- 7.6	1820	231 11.53 48	108 8.88 37	75 3.26 14	3 0.08 0	0 0.00 0	176 2.88 12	968 20.15 86	13 0.37 2	1.0 0.02 0	1.2	0.17	--	1543 1487	1021 877
N/24W-19F015 0/31/67 1200	42	5050	-- 8.2	1838	236 11.78 48	101 8.31 34	97 4.22 17	4 0.10 0	--	200 3.28 13	990 20.61 83	31 0.87 3	5.0 0.08 0	1.1	0.17	--	1666 1564	1005 841
4/25/68 1545	42	5050	-- 8.2	1960	240 11.98 49	102 8.39 34	92 4.00 16	4 0.10 0	0 0.00 0	194 3.18 13	988 20.57 85	17 0.48 2	5.4 0.09 0	1.0	0.20	--	1660 1545	1019 860
9/23/68 1110	42	5050	-- 7.6	1868	224 11.18 40	111 9.13 38	86 3.74 15	4 0.10 0	0 0.00 0	191 3.13 13	966 20.11 87	17 0.48 2	5.5 0.09 0	1.2	0.19	--	1560 1509	1016 859
N/24W-33H015 0/31/67 1130	42	5050	-- 8.5	968	41 2.04 21	11 0.90 9	156 6.78 69	1 0.02 0	21 0.70 7	227 3.72 38	157 3.27 33	76 2.14 22	3.0 0.05 0	0.9	0.34	--	556 579	148 0
4/25/68 1610	42	5050	-- 8.7	1040	53 2.64 27	7 0.57 6	148 6.44 66	3 0.08 1	15 0.50 5	232 3.80 39	160 3.33 34	77 2.17 22	0.2 0.00 0	1.0	0.30	--	640 579	161 0
N/25W-06C015 0/20/67 1800	42	5050	72 7.8	1620	182 9.08 45	63 5.18 26	131 5.70 28	4 0.10 0	--	193 3.16 15	812 16.90 82	16 0.45 2	1.5 0.02 0	0.7	0.12	--	1378 1306	714 530
N/25W-11R015 0/31/67 1230	42	5050	-- 8.0	1709	190 9.48 42	115 9.46 41	87 3.78 17	2 0.05 0	--	186 3.05 13	944 19.65 85	16 0.45 2	1.0 0.02 0	1.0	0.11	--	1538 1448	948 770
4/25/68 1530	42	5050	68 8.2	2100	226 11.28 43	132 10.85 41	98 4.26 16	3 0.08 0	0 0.00 0	249 4.08 16	1040 21.65 83	15 0.42 2	1.7 0.03 0	1.0	0.10	--	1760 1640	1107 903
N/26W-02P015 0/21/67 1200	42	5050	-- 8.0	2016	257 12.82 47	111 9.13 33	123 5.35 19	3 0.08 0	--	148 2.42 9	1145 23.84 88	28 0.79 3	8.0 0.13 0	0.8	0.06	--	1897 1749	1098 977
N/26W-068025 0/22/67 1215	42	5050	80 7.9	2262	215 10.73 35	149 12.25 40	172 7.48 24	7 0.18 1	--	248 4.06 13	1227 25.55 84	28 0.79 3	4.0 0.06 0	0.8	0.12	--	2184 1925	1150 947
N/26W-09R015 1/03/67 1000	42	5050	-- 8.1	2463	207 10.33 29	241 19.82 56	123 5.35 15	5 0.13 0	--	492 8.06 22	1299 27.04 75	29 0.82 2	0.0 0.00 0	0.9	0.04	--	2325 2147	1509 1105
N/25W-20H015 4/25/68 1445	40	5050	63 8.5	1930	249 12.42 54	90 7.40 32	69 3.00 13	4 0.10 0	6 0.20 1	125 2.05 9	946 19.69 87	15 0.42 2	9.0 0.14 1	1.0	0.10	--	1580 1451	992 880
N/25W-21G015 0/23/67 910	40	5050	62 7.8	2604	389 19.41 52	153 12.58 33	124 5.39 14	6 0.15 0	--	284 4.65 12	1524 31.73 83	37 1.04 3	45.0 0.72 2	1.1	0.28	--	2662 2419	1601 1358
4/25/68 1500	40	5050	63 8.2	2370	325 16.22 55	111 9.13 31	87 3.78 13	5 0.13 0	0 0.00 0	217 3.56 12	1180 24.57 85	19 0.53 2	24.0 0.39 1	1.0	0.20	--	2040 1859	1268 1090

TABLE E-1
MINERAL ANALYSES OF GROUND WATER

SOUTHERN CALIFORNIA

STATE WELL NO. DATE	COUNTY	LAB SAMPLER	TEMP PH	EC	MINERAL CONSTITUENTS IN										MILLIGRAMS PER LITER				TDS 180C (*105C) SUM
					MILLIEQUIVALENTS PER LITER					PERCENT REACTANCE VALUES									
					CA	MG	NA	K	CO3	MC03	SO4	CL	N03	F	B	SI02			
CUYAMA VALLEY HYDRO SUBUNIT					SANTA MARIA-CUYAMA HYDRO UNIT														
					T1200					T1200									
10N/25W-21G01S 09/23/68 1300	42	5050	63 7.9	2213	303 15.12 52	113 9.29 32	99 4.31 15	4 0.10 0	0 0.00 0	201 3.29 11	1192 24.82 86	18 0.51 2	22.5 0.36 1	1.2	0.25	--	1935 1852	12 10	
10N/25W-22E01S 09/23/68 1240	42	5050	63 7.6	2106	291 14.52 52	116 9.54 34	87 3.78 13	4 0.10 0	0 0.00 0	191 3.13 11	1128 23.48 85	18 0.51 2	21.5 0.35 1	1.2	0.19	--	1835 1761	12 10	
10N/25W-22F01S 10/23/67 900	40	5050	63 7.8	2451	323 16.12 48	129 10.61 32	144 6.26 19	8 0.20 1	-- 3.16 9	193 26.52 79	1274 26.52 79	63 1.78 5	117.0 1.89 6	1.0	0.30	--	2338 2155	13 11	
10N/25W-22H01S 10/23/67 845	40	5050	65 7.8	1763	232 11.58 51	91 7.48 33	85 3.70 16	4 0.10 0	-- 2.56 11	156 19.09 82	917 19.09 82	41 1.16 5	27.0 0.43 2	1.0	1.19	--	1580 1476	9 8	
04/25/68 1515	40	5050	65 8.3	1990	276 13.77 58	73 6.00 25	91 3.96 17	4 0.10 0	0 0.00 0	151 2.47 10	925 19.26 82	45 1.27 5	32.0 0.52 2	0.6	0.10	--	1630 1521	9 8	
09/23/68 1230	42	5050	66 8.0	1882	233 11.63 48	101 8.31 35	90 3.91 16	4 0.10 0	0 0.00 0	149 2.44 10	926 19.28 82	49 1.38 6	28.0 0.45 2	1.1	0.24	--	1566 1506	9 8	
10N/25W-30F02S 10/20/67 1815	42	5050	64 7.9	1742	222 11.08 48	104 8.55 37	81 3.52 15	4 0.10 0	-- 2.93 13	179 18.74 81	900 18.74 81	29 0.82 3	34.0 0.55 2	1.0	0.16	--	1530 1464	9 8	
09/23/68 1340	42	5050	66 7.6	1809	230 11.48 50	98 8.06 35	76 3.30 14	4 0.10 0	0 0.00 0	175 2.87 13	899 18.72 83	16 0.45 2	38.0 0.61 3	1.2	0.16	--	1589 1449	9 8	
10N/25W-32H01S 04/25/68 1430	42	5050	63 8.4	1890	239 11.93 52	92 7.57 33	73 3.17 14	4 0.10 0	4 0.13 1	160 2.62 12	886 18.45 82	27 0.76 3	38.0 0.61 3	1.0	0.00	--	1540 1443	9 8	
09/23/68 1400	42	5050	64 7.6	1772	222 11.08 49	101 8.31 37	74 3.22 14	3 0.08 0	0 0.00 0	174 2.85 13	883 18.38 83	18 0.51 2	31.5 0.51 2	1.1	0.16	--	1469 1420	9 8	
10N/26W-04R01S 10/21/67 1600	40	5050	-- 7.8	1778	215 10.73 46	91 7.48 32	110 4.78 21	4 0.10 0	-- 2.70 12	165 19.01 84	913 19.01 84	34 0.96 4	3.0 0.05 0	1.0	0.60	--	1587 1453	9 7	
09/23/68 1430	42	5050	-- 7.9	1816	226 11.28 49	85 6.99 30	105 4.57 20	4 0.10 0	0 0.00 0	160 2.62 11	929 19.34 85	30 0.85 4	2.7 0.04 0	1.2	0.59	--	1604 1463	9 7	
10N/26W-04R03S 04/25/68 1230	40	5050	74 8.5	2170	223 11.13 46	74 6.08 25	162 7.05 29	6 0.15 1	4 0.13 0	112 1.83 8	1000 20.82 86	45 1.27 5	2.8 0.04 0	0.5	0.80	--	1800 1574	8 7	
10N/26W-09R03S 04/25/68 1215	42	5050	68 8.5	2070	276 13.77 55	90 7.40 29	88 3.83 15	4 0.10 0	6 0.20 1	127 2.08 8	1050 21.86 88	21 0.59 2	11.0 0.18 1	0.5	0.20	--	1770 1610	10 9	
09/23/68 1450	42	5050	69 7.6	1965	264 13.17 52	99 8.14 32	94 4.09 16	4 0.10 0	0 0.00 0	177 2.90 11	1050 21.86 86	17 0.48 2	9.3 0.15 1	1.0	0.20	--	1764 1626	10 9	
10N/26W-23P01S 09/23/68 1415	42	5050	72 7.6	1911	264 13.17 52	96 7.89 31	94 4.09 16	5 0.13 0	0 0.00 0	146 2.39 10	1061 22.09 88	15 0.42 2	4.8 0.08 0	0.8	0.11	--	1733 1613	10 9	
10N/26W-23002S 04/25/68 1310	40	5050	72 8.6	2070	276 13.77 56	83 6.82 28	88 3.83 16	5 0.13 0	6 0.20 1	129 2.11 9	1030 21.44 88	18 0.51 2	5.5 0.09 0	0.3	0.10	--	1760 1576	10 9	
10N/26W-27N02S 09/23/68 1320	42	5050	72 7.7	1249	118 5.89 40	67 5.51 37	75 3.26 22	4 0.10 1	0 0.00 0	223 3.65 25	505 10.51 71	14 0.39 3	14.0 0.22 1	0.6	0.08	--	896 908	5 3	
10N/27W-01P01S 10/27/67 1000	42	5050	-- 8.1	1976	256 12.77 48	102 8.39 32	120 5.22 20	6 0.15 1	-- 2.87 11	175 22.76 86	1093 22.76 86	32 0.90 3	2.0 0.03 0	0.8	0.26	--	1863 1699	10 9	
10N/27W-11C01S 04/25/68 1130	42	5050	66 8.3	4960	526 26.25 41	264 21.71 34	350 15.22 24	8 0.20 0	0 0.00 0	278 4.56 7	2800 58.30 92	8 0.22 0	12.0 0.19 0	0.4	0.50	--	4850 4106	24 21	
09/23/68 1520	42	5050	-- 7.7	4682	520 25.95 38	306 25.16 37	394 17.14 25	7 0.18 0	0 0.00 0	367 6.01 9	2889 60.15 88	79 2.23 3	7.5 0.12 0	1.6	0.52	--	4785 4386	25 22	
					SAN ANTONIO HYDRO UNIT														
					T1300					T1300									
08N/32W-30H07S 05/02/68 1230	42	5050	65 8.2	737	50 2.49 35	26 2.14 30	56 2.43 34	3 0.08 1	0 0.00 0	128 2.10 30	137 2.85 41	69 1.94 28	5.4 0.09 1	0.0	0.10	--	476 410	7 1	

TABLE E-1
MINERAL ANALYSES OF GROUND WATER
SOUTHERN CALIFORNIA

WELL NO. DATE	COUNTY	LAB SAMPLER	TEMP PH	EC	MINERAL CONSTITUENTS IN				MILLIGRAMS PER LITER MILLIEQUIVALENTS PER LITER PERCENT REACTANCE VALUES				MILLIGRAMS PER LITER				TDS 180C (*105C) SUM	TH NCH
					CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SI02		
SAN ANTONIO HYDRO UNIT																		
T1300																		
W-32W-30H075 9/19/68 915	42	5050	65 6.9	596	42 2.09 36	19 1.56 27	48 2.09 36	3 0.08 1	0 0.00 0	119 1.95 34	93 1.94 33	64 1.80 31	7.2 0.12 2	0.3	0.05	--	408 336	183 85
W-33W-20R015 5/02/68 1215	42	5050	-- 8.3	1190	100 4.99 41	32 2.63 21	105 4.57 37	3 0.08 1	0 0.00 0	360 5.90 48	178 3.70 30	92 2.59 21	0.0 0.00 0	0.2	0.30	--	710 688	381 86
W-33W-20R015 9/19/68 930	42	5050	-- 7.7	1085	101 5.04 43	37 3.04 26	83 3.61 31	2 0.05 0	0 0.00 0	332 5.44 46	186 3.87 33	88 2.48 21	0.0 0.00 0	0.3	0.20	--	743 661	404 132
W-34W-23B035 7/12/67 850	42	5050	65 8.1	1239	86 4.29 36	35 2.88 24	109 4.74 39	5 0.13 1	-- 0.00 0	219 3.59 29	126 2.62 21	207 5.84 47	17.0 0.27 2	0.2	0.18	--	781 694	359 179
W-34W-23B035 5/02/68 1200	42	5050	65 8.3	1310	90 4.49 36	35 2.88 23	113 4.91 39	6 0.15 1	0 0.00 0	218 3.57 29	125 2.60 21	206 5.81 47	24.0 0.39 3	0.2	0.20	--	857 707	369 190
W-34W-23B035 9/19/68 950	42	5050	65 7.9	1220	92 4.59 36	34 2.80 22	116 5.04 40	5 0.13 1	0 0.00 0	220 3.60 29	125 2.60 21	209 5.89 47	23.2 0.37 3	0.3	0.18	--	802 713	370 189
SANTA YNEZ HYDRO UNIT																		
T1400																		
W-34W-21A015 7/17/68 --	42	5050	-- 7.8	733	59 2.94 41	22 1.81 25	55 2.39 33	3 0.08 1	0 0.00 0	196 3.21 45	56 1.16 16	99 2.79 39	0.0 0.00 0	0.2	0.06	--	482 391	238 77
W-34W-28G015 10/11/67 1000	42	5050	67 8.1	1792	109 5.44 26	86 7.07 33	195 8.48 40	5 0.13 1	-- 0.00 0	267 4.38 21	594 12.37 59	148 4.17 20	2.0 0.03 0	0.7	0.88	--	1400 1272	626 407
W-34W-28G015 6/30/68 1450	42	5050	66 8.3	2470	212 10.58 37	105 8.63 30	218 9.48 33	7 0.18 1	0 0.00 0	441 7.23 25	797 16.59 58	169 4.76 17	3.1 0.05 0	0.3	1.20	--	1930 1730	961 600
W-34W-28G015 7/17/68 --	42	5050	68 7.9	2457	142 7.08 33	86 7.07 33	168 7.31 34	5 0.13 1	0 0.00 0	359 5.88 28	546 11.37 54	138 3.89 18	2.0 0.03 0	0.7	0.78	--	1427 1265	708 414
W-34W-29K025 10/11/67 1015	42	5050	67 7.8	2412	265 13.22 41	139 11.43 36	163 7.09 22	5 0.13 0	-- 0.00 0	431 7.06 22	895 18.63 59	209 5.89 19	0.0 0.00 0	0.8	0.48	--	2065 1890	1234 880
W-34W-30A015 10/11/67 1030	42	5050	68 7.7	1770	177 8.83 43	83 6.82 33	109 4.74 23	5 0.13 1	-- 0.00 0	361 5.92 28	419 8.72 42	214 6.03 29	5.0 0.08 0	0.5	0.32	--	1330 1191	783 487
W-34W-30A015 1/02/68 930	42	5050	64 8.1	1690	153 7.63 43	69 5.67 32	95 4.13 23	5 0.13 1	0 0.00 0	365 5.98 35	306 6.37 37	172 4.85 28	2.0 0.03 0	0.2	0.40	--	1300 983	666 367
W-34W-30A015 7/17/68 1330	42	5050	68 7.9	2579	208 10.38 47	86 7.07 32	107 4.65 21	6 0.15 1	0 0.00 0	444 7.28 33	404 8.41 38	229 6.46 29	2.4 0.04 0	0.4	0.35	--	1442 1262	873 509
W-35W-24K025 7/11/67 1200	42	5050	68 7.8	2473	188 9.38 34	75 6.17 22	274 11.92 43	9 0.23 1	-- 0.00 0	418 6.85 25	382 7.95 29	437 12.32 45	13.0 0.21 1	0.5	0.58	--	1713 1585	778 435
W-35W-250015 7/02/68 1035	42	5050	63 8.1	2960	257 12.82 38	145 11.92 36	196 8.52 25	7 0.18 0	0 0.00 0	463 7.59 23	822 17.11 52	294 8.29 25	7.6 0.12 0	0.2	0.80	--	2200 1958	1238 859
W-35W-250035 7/17/68 1420	42	5050	-- 7.7	3650	232 11.58 35	142 11.68 36	209 9.09 28	11 0.28 1	0 0.00 0	421 6.90 21	826 17.20 53	296 8.35 26	6.0 0.10 0	0.7	0.67	--	2156 1931	1164 818
W-35W-36A015 7/11/67 1120	42	5050	64 7.9	1363	101 5.04 33	84 6.91 45	80 3.48 22	2 0.05 0	-- 0.00 0	323 5.29 34	305 6.35 41	142 4.00 26	0.0 0.00 0	0.5	0.12	--	975 874	598 333
SANTA RITA HYDRO SUBUNIT																		
T1480																		
W-32W-18H015 7/30/68 1315	42	5050	65 8.1	3100	294 14.67 40	171 14.06 38	185 8.05 22	4 0.10 0	0 0.00 0	520 8.52 23	984 20.49 56	248 6.99 19	39.0 0.63 2	1.3	0.80	--	2550 2183	1438 1011
W-32W-18H015 7/17/68 --	42	5050	64 7.8	2722	224 11.18 34	174 14.31 43	173 7.52 23	3 0.08 0	0 0.00 0	328 5.37 16	894 18.61 57	263 7.42 23	68.7 1.11 3	1.4	0.58	--	2216 1963	1275 1006
W-33W-20B015 7/07/68 --	42	5050	68 7.4	1266	147 7.33 47	67 5.51 36	57 2.48 16	4 0.10 1	-- 0.00 0	553 9.06 60	177 3.68 24	85 2.40 16	0.5 0.01 0	0.3	0.11	--	867 810	643 189

TABLE E-1
MINERAL ANALYSES OF GROUND WATER
SOUTHERN CALIFORNIA

STATE WELL NO. DATE	COUNTY	LAB SAMPLER	TEMP PH	EC	MINERAL CONSTITUENTS IN				MILLIGRAMS PER LITER MILLIEQUIVALENTS PER LITER PERCENT REACTANCE VALUES				MILLIGRAMS PER LITER				TOS 180C (*105C) SUM
					CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	8	SiO2	
SANTA RITA HYDRO SUBUNIT					SANTA YNEZ HYDRO UNIT					T1400							
06N/33W-21G01S 01/12/68	42	5050	58 7.6	1245	144 7.18 47	67 5.51 36	56 2.43 16	4 0.10 1	--	542 8.88 59	185 3.85 25	85 2.40 16	0.8 0.01 0	0.3	0.10	--	932 809
06N/33W-21G02S 01/26/68	42	5050	69 7.9	1096	38 1.90 16	15 1.23 11	190 8.26 72	4 0.10 1	--	151 2.47 22	296 6.16 54	100 2.82 25	1.2 0.02 0	0.5	0.13	--	717 720
07N/33W-30B01S 04/30/68 1410	42	5050	68 7.8	1480	55 2.74 21	36 2.96 23	164 7.13 55	5 0.13 1	0 0.00 0	50 0.82 6	36 0.75 6	380 10.72 84	25.0 0.40 3	0.3	0.10	--	840 726
09/17/68 1100	42	5050	70 7.7	1426	57 2.84 22	35 2.88 23	157 6.83 54	5 0.13 1	0 0.00 0	50 0.82 6	30 0.62 5	380 10.72 85	29.0 0.47 4	0.3	0.09	--	884 718
07N/34W-35H01S 04/30/68 1350	42	5050	68 8.3	2850	129 6.44 21	75 6.17 20	395 17.18 57	12 0.31 1	0 0.00 0	585 9.59 32	458 9.53 32	357 10.07 34	20.0 0.32 1	0.3	1.50	--	2400 1736
BUELLTON HYDRO SURUNIT					T14C0												
07N/32W-01B01S 05/02/68 1245	42	5050	66 8.2	734	62 3.09 43	23 1.89 26	49 2.13 30	3 0.08 1	0 0.00 0	258 4.23 60	12 0.25 4	79 2.23 32	19.0 0.31 4	0.2	0.10	--	377 375
07N/33W-30R01S 10/11/67 900	42	5050	67 7.5	1384	56 2.79 22	33 2.71 22	157 6.83 55	4 0.10 1	--	49 0.80 6	30 0.62 5	380 10.72 86	20.0 0.32 3	0.5	0.06	--	902 705
SANTA YNEZ HYDRO SURUNIT					T1400												
06N/30W-02M01S 09/18/68 930	42	5050	74 8.2	790	22 1.10 12	73 6.00 66	45 1.96 21	2 0.05 1	0 0.00 0	434 7.11 79	28 0.58 6	42 1.18 13	5.8 0.09 1	0.1	0.10	--	422 432
06N/30W-03A01S 04/30/68 910	42	5050	-- 9.2	850	41 2.04 22	77 6.33 68	22 0.96 10	1 0.02 0	62 2.07 22	353 5.78 62	28 0.58 6	29 0.82 9	5.0 0.08 1	0.2	0.10	--	504 439
06N/30W-07C04S 10/13/67 --	42	5050	70 8.3	628	28 1.40 20	55 4.52 65	23 1 14	2 0.05 1	12 0.40 6	258 4.23 63	13 0.27 4	61 1.72 25	8.0 0.13 2	0.2	0.20	--	383 330
04/30/68 1010	42	5050	66 8.9	665	41 2.04 29	46 3.78 55	24 1.04 15	2 0.05 1	24 0.80 12	230 3.77 56	12 0.25 4	61 1.72 25	12.0 0.19 3	0.2	0.00	--	375 336
09/18/68 1020	42	5050	70 8.5	615	27 1.35 20	54 4.44 66	22 0.96 14	1 0.02 0	10 0.33 5	255 4.18 63	13 0.27 4	60 1.69 25	10.3 0.17 2	0.1	0.04	--	319 323
06N/30W-24H01S 04/30/68 850	42	5050	-- 8.7	897	105 5.24 65	20 1.64 20	26 1.13 14	2 0.05 1	11 0.37 5	158 2.59 33	214 4.45 56	17 0.48 6	0.0 0.00 0	0.4	0.30	--	627 474
06N/31W-14G02S 05/02/68 1800	42	5050	68 8.2	1010	74 3.69 34	62 5.10 46	49 2.13 19	2 0.05 0	0 0.00 0	388 6.36 59	124 2.58 24	56 1.58 15	12.0 0.19 2	0.2	0.00	--	597 570
07N/30W-22E01S 10/18/67 1240	42	5050	68 8.2	870	43 2.14 20	87 7.15 68	26 1.13 11	1 0.02 0	--	540 8.85 84	25 0.52 5	39 1.10 10	1.5 0.02 0	0.2	0.22	--	522 489
04/30/68 1040	42	5050	66 9.1	917	51 2.54 26	76 6.25 64	22 0.96 10	1 0.02 0	56 1.87 19	377 6.18 64	23 0.48 5	36 1.01 10	5.1 0.08 1	0.2	0.00	--	544 456
09/18/68 --	42	5050	68 8.6	852	42 2.09 20	85 6.99 68	27 1.17 11	1 0.02 0	26 0.87 8	473 7.75 76	22 0.46 4	36 1.01 10	4.8 0.08 1	0.2	0.09	--	458 477
07N/30W-27O02S 10/18/67 1420	42	5050	-- 8.5	862	63 3.14 30	74 6.08 58	28 1.22 12	2 0.05 0	52 1.73 16	428 7.01 66	34 0.71 7	42 1.18 11	3.5 0.06 0	0.2	0.23	--	527 510
09/18/68 --	42	5050	69 8.3	852	36 1.80 17	89 7.32 70	28 1.22 12	2 0.05 0	0 0.00 0	513 8.41 82	35 0.73 7	36 1.01 10	3.4 0.05 0	0.2	0.12	--	413 482
07N/30W-33M01S 09/18/68 --	42	5050	-- 8.5	745	30 1.50 17	76 6.25 71	24 1.04 12	2 0.05 1	13 0.43 5	409 6.70 78	20 0.42 5	33 0.93 11	6.0 0.10 1	0.2	0.08	--	383 406
07N/31W-23N05S 04/30/68 1130	42	5050	65 8.3	1150	93 4.64 35	82 6.74 51	41 1.78 13	1 0.02 0	0 0.00 0	461 7.55 58	212 4.41 34	32 0.90 7	15.0 0.24 2	0.5	0.10	--	687 704
09/18/68 1210	42	5050	-- 7.4	1094	93 4.64 36	79 6.50 50	41 1.78 14	2 0.05 0	0 0.00 0	461 7.55 59	209 4.35 34	26 0.73 6	13.0 0.21 2	0.6	0.11	--	751 691

TABLE E-1

MINERAL ANALYSES OF GROUND WATER

SOUTHERN CALIFORNIA

WELL NO. DATE	COUNTY	LAB SAMPLER	TEMP PH	EC	MINERAL CONSTITUENTS IN				MILLIGRAMS PER LITER MILLIEQUIVALENTS PER LITER PERCENT REACTANCE VALUES				MILLIGRAMS PER LITER					TDS 180C (*105C) SUM	TH NCH
					CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SI02			
SANTA YNEZ HYDRO UNIT					T1400														
SANTA YNEZ HYDRO SUBUNIT					T14E0														
30W-24H01S	42	5050	63	769	84	41	27	1	--	268	190	20	0.0	0.6	0.27	--	557	378	
18/67 1050	--	--	8.1		4.19	3.37	1.17	0.02		4.39	3.95	0.56	0.00				496	159	
					48	38	13	0		49	44	6	0						
SANTA BARBARA HYDRO UNIT					T1500														
SANTA BARBARA HYDRO SUBUNIT					T15A0														
32W-12G01S	42	5050	--	1173	--	18	167	2	--	232	148	168	0.5	1.0	0.94	--	703	--	
14/67 --	--	--	7.9			1.48	7.26	0.05		3.80	3.08	4.74	0.01				620*	--	
						17	83	1		33	26	41	0						
30W-02M01S	42	5050	76	843	34	66	50	2	50	344	29	40	6.0	0.2	0.10	--	473	356	
30/68 930	--	--	8.9		1.70	5.43	2.17	0.05	1.67	5.64	0.60	1.13	0.10				447	0	
					18	58	23	0	18	62	7	12	1						
35W-18J01S	42	5050	--	5800	67	97	952	40	17	455	98	1550	6.2	0.4	1.10	--	3200	566	
02/68 1120	--	--	8.5		3.34	7.98	41.41	1.02	0.57	7.46	2.04	43.71	0.10				3053	165	
					6	15	77	2	1	14	4	81	0						
18/68 1410	42	5050	--	5376	62	99	985	36	0	483	98	1580	6.8	0.7	1.03	--	3186	562	
	--	--	8.1		3.09	8.14	42.85	0.92	0.00	7.92	2.04	44.55	0.11				3106	166	
					6	15	78	2	0	14	4	82	0						
35W-18J02S	42	5050	64	2450	193	110	176	9	0	461	459	315	9.3	0.2	0.40	--	1640	935	
02/68 1100	--	--	8.2		9.63	9.05	7.65	0.23	0.00	7.55	9.56	8.88	0.15				1499	556	
					36	34	29	1	0	29	36	34	1						
SANTA BARBARA HYDRO SUBAREA					T15C0														
GOLETA HYDRO SUBAREA					T15C1														
28W-16J02S	42	5050	70	977	123	29	60	2	0	355	206	37	0.0	0.5	0.07	--	700	426	
16/68 1530	--	--	7.7		6.14	2.38	2.61	0.05	0.00	5.82	4.29	1.04	0.00				633	135	
					55	21	23	0	0	52	38	9	0						
28W-18F02S	42	5050	--	1584	61	55	207	11	--	432	240	169	0.0	0.4	0.46	--	968	379	
19/67 940	--	--	7.9		3.04	4.52	9.00	0.28		7.08	5.00	4.76	0.00				957	24	
					18	27	53	2		42	30	28	0						
23/68 1500	42	5050	68	1610	102	47	174	18	4	473	240	135	14.0	0.3	0.50	--	977	448	
	--	--	8.4		5.09	3.86	7.57	0.46	0.13	7.75	5.00	3.81	0.22				968	53	
					30	23	45	3	1	46	29	22	1						
16/68 1530	42	5050	68	1403	51	45	178	17	0	411	139	159	12.5	0.3	0.37	--	861	312	
	--	--	7.9		2.54	3.70	7.74	0.43	0.00	6.74	2.89	4.48	0.20				805	0	
					18	26	54	3	0	47	20	31	1						
SANTA BARBARA HYDRO SUBAREA					T15C2														
28W-15F04S	42	5050	67	923	93	35	50	1	0	239	205	40	15.0	0.5	0.05	--	654	376	
16/68 1430	--	--	7.7		4.64	2.88	2.17	0.02	0.00	3.92	4.27	1.13	0.24				558	180	
					48	30	22	0	0	41	45	12	2						
27W-15Q09S	42	5050	74	724	77	25	41	2	--	251	129	37	4.0	0.4	0.17	--	491	295	
16/67 930	--	--	8.1		3.84	2.05	1.78	0.05		4.11	2.68	1.04	0.06				439	89	
					50	27	23	1		52	34	13	1						
23/68 1145	42	5050	74	783	83	25	44	1	0	257	136	33	7.2	0.3	0.10	--	475	310	
	--	--	8.3		4.14	2.05	1.91	0.02	0.00	4.21	2.83	0.93	0.12				456	99	
					51	25	23	0	0	52	35	11	1						
16/68 1220	42	5050	74	727	77	25	43	1	0	239	128	32	9.3	0.4	0.03	--	449	295	
	--	--	8.2		3.84	2.05	1.87	0.02	0.00	3.92	2.66	0.90	0.15				434	99	
					49	26	24	0	0	51	35	12	2						
27W-18Q02S	42	5050	66	2490	146	51	290	2	0	308	213	513	16.0	0.5	0.10	--	1460	574	
23/68 1300	--	--	8.2		7.28	4.19	12.61	0.05	0.00	5.05	4.43	14.47	0.26				1383	322	
					30	17	52	0	0	21	18	60	1						
28W-15F04S	42	5050	67	894	94	36	51	2	--	259	206	43	16.0	0.6	0.04	--	592	383	
10/67 850	--	--	7.6		4.69	2.96	2.22	0.05		4.24	4.29	1.21	0.26				576	170	
					47	30	22	0		42	43	12	3						
23/68 1345	42	5050	67	1090	133	36	53	1	0	366	209	41	17.0	0.4	0.10	--	712	480	
	--	--	8.3		6.64	2.96	2.30	0.02	0.00	6.00	4.35	1.16	0.27				671	180	
					56	25	19	0	0	51	37	10	2						
CARPINTERIA HYDRO SUBAREA					T15C4														
25W-20L01S	42	5050	66	1038	100	40	71	1	0	316	161	45	84.0	0.5	0.09	--	671	414	
16/68 --	--	--	8.2		4.99	3.29	3.09	0.02	0.00	5.18	3.35	1.27	1.35				658	155	
					44	29	27	0	0	46	30	11	12						
25W-22R03S	42	5050	63	827	90	27	53	2	--	274	156	32	28.0	0.6	0.14	--	528	336	
09/67 1320	--	--	8.2		4.49	2.22	2.30	0.05		4.49	3.25	0.90	0.45				524	111	
					49	24	25	1		49	36	10	5						
23/68 950	42	5050	61	898	94	27	56	1	0	290	167	29	26.0	0.4	0.10	--	528	346	
	--	--	8.2		4.69	2.22	2.43	0.02	0.00	4.75	3.48	0.82	0.42				544	108	
					50	24	26	0	0	50	37	9	4						

TABLE E-1
MINERAL ANALYSES OF GROUND WATER
SOUTHERN CALIFORNIA

STATE WELL NO. DATE	COUNTY	LAB SAMPLER	TEMP PH	EC	MINERAL CONSTITUENTS IN	MILLIGRAMS PER LITER								MILLIGRAMS PER LITER				TDS 180C (*105C) SUM
						MILLIEQUIVALENTS PER LITER				PERCENT REACTANCE VALUES								
						CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SI02	
					SANTA BARBARA HYDRO UNIT								T1500					
					T15C0				T15C4									
04N/25W-22R03S 09/16/68 945	42	5050	63 8.3	855	96 4.79 51	27 2.22 24	52 2.26 24	1 0.02 0	0 0.00 0	270 4.42 48	165 3.43 37	29 0.82 9	31.5 0.51 5	0.5	0.09	--	548 535	
04N/25W-26B02S 10/09/67 1250	42	5050	68 8.0	667	60 2.99 43	27 2.22 32	41 1.78 25	1 0.02 0	-- 2.83 39	173 3.18 44	153 3.18 13	33 0.93 13	15.0 0.24 3	0.5	0.02	--	454 416	
09/16/68 930	42	5050	-- 7.6	869	113 5.64 58	29 2.38 24	40 1.74 18	1 0.02 0	0 0.00 0	325 5.33 54	157 3.27 33	39 1.10 11	12.8 0.21 2	0.3	0.03	--	568 552	
04N/25W-28N03S 10/09/67 1100	42	5050	67 8.0	1043	78 3.89 34	41 3.37 30	91 3.96 35	4 0.10 1	-- 3.90 34	238 4.56 40	219 2.82 25	100 2.82 0	2.0 0.03 0	0.6	0.20	--	658 653	
04/23/68 900	42	5050	64 8.2	1190	93 4.64 39	40 3.29 28	88 3.83 32	4 0.10 1	0 0.00 0	295 4.83 41	212 4.41 37	93 2.62 22	1.2 0.02 0	0.4	0.20	--	728 677	
09/16/68 845	42	5050	65 7.6	1209	128 6.39 47	43 3.54 26	83 3.61 26	3 0.08 1	0 0.00 0	398 6.52 48	210 4.37 32	90 2.54 19	1.3 0.02 0	0.5	0.17	--	776 755	
04N/25W-29D03S 04/23/68 1030	42	5050	66 8.2	772	60 2.99 39	26 2.14 28	57 2.48 32	1 0.02 0	0 0.00 0	251 4.11 55	122 2.54 34	26 0.73 10	5.3 0.08 1	0.4	0.10	--	439 422	
04N/25W-29D04S 10/09/67 1350	42	5050	67 8.1	641	51 2.54 38	22 1.81 27	54 2.35 35	1 0.02 0	-- 3.60 52	220 2.43 35	117 2.43 11	28 0.79 11	6.0 0.10 1	0.6	0.04	--	408 388	
04N/26W-13HS2S 10/19/67 1030	42	5050	60 8.5	640	3 0.15 2	1 0.08 1	142 6.18 95	4 0.10 2	14 0.47 8	217 3.56 58	80 1.66 27	14 0.39 6	0.0 0.00 0	8.2	1.77	--	331 375*	
04N/26W-24F08S 10/09/67 1405	42	5050	-- 7.8	1319	67 3.34 25	50 4.11 30	137 5.96 44	3 0.08 1	-- 5.64 40	344 1.31 9	63 6.17 44	219 0.85 6	53.0 0.85 6	1.0	0.14	--	740 763	
04/23/68 1050	42	5050	-- 8.4	1470	97 4.84 33	46 3.78 26	133 5.78 40	2 0.05 0	6 0.20 1	360 5.90 42	72 1.50 11	216 6.09 43	28.0 0.45 3	1.0	0.60	--	820 779	
09/16/68 --	42	5050	-- 8.0	1301	66 3.29 25	47 3.86 30	134 5.83 45	1 0.02 0	0 0.00 0	281 4.60 36	62 1.29 10	222 6.26 48	46.5 0.75 6	0.9	0.59	--	741 719	

TABLE E-1

MINERAL ANALYSES OF GROUND WATER

SOUTHERN CALIFORNIA

WELL NO. DATE	COUNTY	LAB SAMPLER	TEMP PH	EC	MINERAL CONSTITUENTS IN										TDS 180C (*105C) SUM	TH NCH		
					CA	MG	NA	K	MILLIGRAMS PER LITER PERCENT REACTANCE VALUES			MILLIGRAMS PER LITER						
					VENTURA RIVER HYDRO UNIT					U0200								
VENTURA RIVER HYDRO SUBUNIT U02B0																		
1/23W-168085	56	5050	--	1000	122	31	51	2	0	327	181	49	21.0	0.6	0.56	--	670	432
1/03/67 1600	--	--	7.9		6.09	2.55	2.22	0.05	0.00	5.36	3.77	1.38	0.34				619	164
					56	23	20	0	0	49	35	13	3					
1/26/68 --	56	5050	--	1002	121	34	51	2	0	315	198	45	19.5	0.6	0.62	--	690	442
			7.8		6.04	2.80	2.22	0.05	0.00	5.16	4.12	1.27	0.31				627	184
					54	25	20	0	0	47	38	12	3					
OJAI HYDRO SUBUNIT U02C0																		
OJAI HYDRO SUBAREA U02C2																		
1/22W-06J07S	56	5050	64	847	111	29	30	1	0	205	203	29	42.0	0.4	0.09	--	640	396
1/26/68 --	--	--	7.4		5.54	2.38	1.30	0.02	0.00	3.36	4.23	0.82	0.68				547	228
					60	26	14	0	0	37	46	9	7					
OXNARD PLAIN HYDRO SUBUNIT U03A0																		
OXNARD HYDRO SUBAREA U03A1																		
1/22E-25A04S	56	5050	--	1383	135	50	119	4	0	262	482	47	8.2	0.9	0.71	--	1078	543
1/26/68 --	--	--	7.9		6.74	4.11	5.18	0.10	0.00	4.29	10.03	1.32	0.13				976	328
					42	25	32	1	0	27	64	8	1					
1/21W-19R05S	56	5050	69	1174	123	39	86	4	--	279	346	44	3.6	0.7	0.60	--	822	468
1/26/68 --	--	--	7.4		6.14	3.21	3.74	0.10		4.57	7.20	1.24	0.06				785	239
					46	24	28	1		35	55	9	0					
1/21W-30A02S	56	5050	71	1020	97	30	87	4	0	271	266	36	2.0	0.5	0.62	--	716	366
1/26/68 --	--	--	7.8		4.84	2.47	3.78	0.10	0.00	4.44	5.54	1.01	0.03				657	143
					43	22	34	1	0	40	50	9	0					
1/22W-02K04S	56	5050	--	1900	212	73	151	5	0	281	795	70	0.7	0.9	0.98	--	1596	830
1/26/68 --	--	--	7.7		10.58	6.00	6.57	0.13	0.00	4.60	16.55	1.97	0.01				1447	599
					45	26	28	0	0	20	71	8	0					
1/21W-18R05S	56	5050	--	1074	84	26	123	4	0	317	237	58	1.0	0.3	0.42	--	700	367
1/02/67 1650	--	--	7.8		4.19	2.14	5.35	0.10	0.00	5.19	4.93	1.63	0.02				690	107
					36	18	45	1	0	44	42	14	0					
1/21W-19C01S	56	5050	70	1116	103	36	99	7	--	267	334	46	1.5	0.5	0.51	--	843	405
1/26/68 --	--	--	7.7		5.14	2.96	4.31	0.18		4.38	6.95	1.30	0.02				759	186
					41	23	34	1		35	55	10	0					
1/21W-19G02S	56	5050	--	1479	150	52	131	7	--	265	541	49	4.5	0.9	0.83	--	1120	588
1/21/68 --	--	--	7.8		7.48	4.28	5.70	0.18		4.34	11.26	1.38	0.07				1067	371
					42	24	32	1		25	66	8	0					
1/22W-12E01S	56	5050	65	1451	100	54	137	6	--	255	484	48	0.0	0.7	0.64	--	1123	472
1/26/68 --	--	--	7.6		4.99	4.44	5.96	0.15		4.18	10.08	1.35	0.00				956	263
					32	29	38	1		27	64	9	0					
1/22W-12N06S	56	5050	--	1538	167	64	99	5	--	278	541	67	2.0	0.9	0.68	--	1162	680
1/20/68 --	--	--	7.6		8.33	5.26	4.31	0.13		4.56	11.26	1.89	0.03				1084	452
					46	29	24	1		26	63	11	0					
1/22W-15Q01S	56	5050	66	1761	189	67	143	5	0	308	620	74	60.0	0.8	0.80	--	1417	748
1/26/68 --	--	--	7.4		9.43	5.51	6.22	0.13	0.00	5.05	12.91	2.09	0.97				1311	495
					44	26	29	1	0	24	61	10	5					
1/22W-20M07S	56	5050	--	1351	120	42	127	7	--	198	476	57	3.5	0.8	0.60	--	965	472
1/27/68 --	--	--	7.7		5.99	3.45	5.52	0.18		3.24	9.91	1.61	0.06				932	310
					39	23	36	1		22	67	11	0					
1/22W-24P01S	56	5050	--	1451	153	52	108	5	0	266	508	60	6.5	0.9	0.76	--	1120	595
1/02/67 1200	--	--	7.8		7.63	4.28	4.70	0.13	0.00	4.36	10.58	1.69	0.10				1025	377
					46	25	28	1	0	26	63	10	1					
1/22W-25A04S	56	5050	--	1383	135	50	119	4	0	262	482	47	8.2	0.9	0.71	--	1078	543
1/26/68 --	--	--	7.9		6.74	4.11	5.18	0.10	0.00	4.29	10.03	1.32	0.13				976	328
					42	25	32	1	0	27	64	8	1					
1/22W-26F99S	56	5867	--	1483	143	43	124	--	--	270	480	59	5.0	0.6	0.64	--	1124	534
1/12/68 900	--	--	7.3		7.13	3.54	5.39			4.42	9.99	1.66	0.08				988	313
					44	22	34			27	62	10	0					
1/09/68 915	56	5867	--	1473	148	49	122	--	--	270	516	60	34.0	0.7	0.56	--	1199	571
			7.3		7.38	4.03	5.31			4.42	10.74	1.69	0.55				1063	350
					44	24	32			25	62	10	3					
PLEASANT VALLEY HYDRO SUBAREA U03A2																		
1/21W-09F01S	56	5050	78	797	63	20	84	4	--	270	136	39	0.0	0.5	0.16	--	475	240
1/25/68 --	--	--	7.4		3.14	1.64	3.65	0.10		4.42	2.83	1.10	0.00				480	18
					37	19	43	1		53	34	13	0					
SANTA PAULA HYDRO SUBUNIT U0380																		
SANTA PAULA HYDRO SUBAREA U0381																		
1/21W-16K01S	56	5050	67	1792	204	68	117	5	--	322	650	80	3.0	0.7	0.75	--	1482	789
1/26/68 --	--	--	7.4		10.18	5.59	5.09	0.13		5.28	13.53	2.26	0.05				1287	525
					48	27	24	1		25	64	11	0					

TABLE E-1

MINERAL ANALYSES OF GROUND WATER

SOUTHERN CALIFORNIA

STATE WELL NO. DATE	COUNTY TIME	LAB SAMPLER	TEMP PH	EC	MINERAL CONSTITUENTS IN				MILLIGRAMS PER LITER MILLIEQUIVALENTS PER LITER PERCENT REACTANCE VALUES				MILLIGRAMS PER LITER				TDS 180C (*105C) SUM	
					CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SI02		
					SANTA CLARA-CALLEGUAS HYDRO UNIT U0300													
SANTA PAULA HYDRO SUBUNIT					U0380													
SANTA PAULA HYDRO SUBAREA					U0381													
03N/21W-21801S	56	5050	--	2083	248	65	179	9	--	375	769	115	0.5	0.9	0.94	--	1690	
03/21/68	--	--	7.3		12.37	5.34	7.79	0.23		6.15	16.01	3.24	0.01				1572	
					48	21	30	1		24	63	13	0					
03N/21W-21E01S	56	5050	79	2197	246	71	202	8	--	426	779	124	1.5	0.8	1.12	--	1746	
03/21/68	--	--	7.2		12.27	5.84	8.79	0.20		6.98	16.22	3.50	0.02				1643	
					45	21	32	1		26	61	13	0					
09/26/68	--	56	5050	67	2217	238	89	197	8	--	476	795	132	5.0	0.7	1.17	--	1888
			--	7.3	11.88	7.32	8.57	0.20		7.80	16.55	3.72	0.08				1700	
					42	26	31	1		28	59	13	0					
03N/21W-21F01S	56	5050	--	2058	174	79	210	9	--	387	692	136	0.0	0.8	1.06	--	1667	
09/26/68	--	--	7.5		8.68	6.50	9.13	0.23		6.34	14.41	3.83	0.00				1493	
					35	26	37	1		26	59	16	0					
03N/21W-29R01S	56	5867	--	1723	--	--	--	--	--	--	--	96	--	--	--	--	--	
07/31/68	--	--	--									2.71					--	
08/26/68	--	56	5867	--	1901	166	58	186	--	--	300	660	99	--	0.8	0.85	--	1469
			--	7.2	8.28	4.77	8.09			4.92	13.74	2.79					--	
09/05/68	--	56	5867	--	1973	170	60	196	--	--	309	672	107	--	0.9	0.76	--	1511
			--	7.4	8.48	4.93	8.52			5.06	13.99	3.02					--	
SESPE HYDRO SUBUNIT					U03C0													
FILLMORE HYDRO SUBAREA					U03C1													
04N/19W-32G01S	56	5050	60	1144	118	47	77	4	0	228	413	21	5.3	1.0	0.70	--	869	
09/27/68	--	--	8.0		5.89	3.86	3.35	0.10	0.00	3.74	8.60	0.59	0.08				800	
					45	29	25	1	0	29	66	4	1					
04N/20W-25J01S	56	5867	--	2470	262	102	163	--	--	540	770	94	60.0	0.8	0.60	--	1991	
09/06/68	1500	--	7.0		13.07	8.39	7.09			8.85	16.03	2.65	0.97				1718	
					46	29	25			31	56	9	3					
PIRU HYDRO SUBUNIT					U03D0													
PIRU HYDRO SUBAREA					U03D1													
04N/19W-25C02S	56	5050	--	1684	189	80	103	5	0	268	698	40	30.0	0.9	1.20	--	1435	
09/27/68	--	--	7.5		9.43	6.58	4.48	0.13	0.00	4.39	14.53	1.13	0.48				1279	
					46	32	22	1	0	21	71	5	2					
UPPER SANTA CLARA R HYDRO SUBUNIT					U03E0													
EASTERN HYDRO SUBAREA					U03E1													
03N/16W-04A02S	70	1101	--	1260	137	39	103	3	0	219	474	50	7.3	0.4	--	0	1032	
09/17/68	900	1101	7.4		6.84	3.21	4.48	0.08	0.00	3.59	9.87	1.41	0.12				922	
					47	22	31	0	0	24	66	9	1					
04N/14W-17E03S	70	1101	--	650	64	18	60	2	14	264	72	34	6.0	--	--	0	534	
10/03/67	--	1101	8.6		3.19	1.48	2.61	0.05	0.47	4.33	1.50	0.96	0.10				400	
					43	20	36	1	6	59	20	13	1					
09/17/68	1400	70	1101	--	670	58	20	58	1	0	253	84	47	6.5	0.4	--	0	527
			1101	8.2	2.89	1.64	2.52	0.02	0.00	4.15	1.75	1.32	0.10				400	
					41	23	36	0	0	57	24	18	1					
04N/15W-06P02S	70	1101	--	794	65	28	72	1	0	317	105	42	23.3	0.8	--	0	654	
09/17/68	1300	1101	7.7		3.24	2.30	3.13	0.02	0.00	5.19	2.19	1.18	0.37				493	
					37	26	36	0	0	58	24	13	4					
04N/15W-11F01S	70	1101	--	1100	58	38	135	2	14	334	123	96	42.0	--	--	0	842	
10/03/67	--	1101	8.6		2.89	3.12	5.87	0.05	0.47	5.47	2.56	2.71	0.68				673	
					24	26	49	0	4	46	21	23	6					
09/17/68	1330	70	1101	--	1100	91	36	107	1	0	394	131	95	35.2	1.0	--	0	891
			1101	8.2	4.54	2.96	4.65	0.02	0.00	6.46	2.73	2.68	0.57				691	
					37	24	38	0	0	52	22	21	5					
04N/15W-21A01S	70	5050	--	1144	84	40	106	4	--	415	114	94	34.0	0.8	0.70	--	735	
09/27/68	--	--	7.5		4.19	3.29	4.61	0.10		6.80	2.37	2.65	0.55				682	
					34	27	38	1		55	19	21	4					
04N/15W-21M05S	70	1101	--	767	75	26	70	2	18	286	87	50	31.0	--	--	0	645	
10/03/67	--	1101	8.8		3.74	2.14	3.04	0.05	0.60	4.69	1.81	1.41	0.50				500	
					42	24	34	1	7	52	20	16	5					
09/17/68	1300	70	1101	--	779	84	21	50	3	0	309	69	37	27.2	0.6	--	0	600
			1101	7.5	4.19	1.73	2.17	0.08	0.00	5.06	1.44	1.04	0.44				444	
					51	21	27	1	0	63	18	13	5					
04N/15W-23F01S	70	1101	--	728	72	20	68	2	24	266	80	44	14.0	--	--	0	590	
10/03/67	--	1101	8.9		3.59	1.64	2.96	0.05	0.80	4.36	1.66	1.24	0.22				455	
					44	20	36	1	10	53	20	15	3					
09/17/68	1345	70	1101	--	714	74	18	60	2	0	315	82	36	8.6	0.6	--	0	596
			1101	7.9	3.69	1.48	2.61	0.05	0.00	5.16	1.71	1.01	0.14				437	
					47	19	33	1	0	64	21	13	2					
04N/15W-26K01S	70	1101	--	769	94	25	44	4	0	303	130	16	43.0	--	--	0	659	
10/03/67	--	1101	8.0		4.69	2.05	1.91	0.10	0.00	4.97	2.71	0.45	0.69				505	
					53	23	22	1	0	56	31	5	8					

TABLE E-1
MINERAL ANALYSES OF GROUND WATER

SOUTHERN CALIFORNIA

WELL NO. DATE	COUNTY	LAB SAMPLER	TEMP PH	EC	MILLIGRAMS PER LITER MINERAL CONSTITUENTS IN MILLIEQUIVALENTS PER LITER PERCENT REACTANCE VALUES								MILLIGRAMS PER LITER					TDS 180C (*105C) SUM	TH NCH
					CA	MG	NA	K	CO3	HCO3	504	CL	NO3	F	B	SI02			
					SANTA CLARA-CALLEGUAS HYDRO UNIT U0300														
SANTA CLARA R HYDRO SUBUNIT U03E0 EASTERN HYDRO SUBAREA U03E1																			
16W-16D015 /03/67 --	70	1101	--	996	64 3.19 31	36 2.96 28	96 4.17 40	2 0.05 0	0 0.00 0	233 3.82 36	252 5.25 50	50 1.41 13	3.0 0.05 0	--	--	0	736 618	307 116	
17/68 1130	70	1101	--	971	87 4.34 39	34 2.80 25	88 3.83 35	1 0.02 0	0 0.00 0	300 4.92 44	230 4.79 43	42 1.18 11	12.4 0.20 2	0.8	--	0	795 643	357 111	
16W-21D015 /27/68 --	70	5050	67	864	101 5.04 51	30 2.47 25	52 2.26 23	4 0.10 1	-- 4.26 43	260 4.93 50	237 0.65 6	23 0.65 6	5.0 0.08 1	0.6	0.21	--	629 581	376 162	
16W-22M015 /03/67 --	70	1101	--	653	61 3.04 42	16 1.31 18	64 2.78 39	2 0.05 1	14 0.47 6	204 3.34 46	129 2.68 37	24 0.68 9	6.0 0.10 1	--	--	0	520 417	218 27	
17/68 1145	70	1101	--	661	69 3.44 49	16 1.31 19	51 2.22 32	1 0.02 0	0 0.00 0	223 3.65 50	141 2.93 41	22 0.62 9	1.7 0.03 0	--	--	0	524 412	238 55	
16W-23G03S /03/67 --	70	1101	--	842	88 4.39 49	21 1.73 19	65 2.83 31	3 0.08 1	0 0.00 0	314 5.15 53	128 2.66 27	46 1.30 13	37.0 0.60 6	--	--	0	702 543	306 48	
17/68 1255	70	1101	--	826	90 4.49 51	19 1.56 18	63 2.74 31	2 0.05 1	0 0.00 0	258 4.23 49	133 2.77 32	43 1.21 14	29.3 0.47 5	0.6	--	0	637 507	302 90	
16W-27J02S /17/68 1500	70	1101	--	901	114 5.69 57	26 2.14 21	50 2.17 22	1 0.02 0	0 0.00 0	230 3.77 39	236 4.91 50	30 0.85 9	12.4 0.20 2	0.6	--	0	700 584	391 202	
16W-33L01S /20/68 --	70	5050	79	1570	112 5.59 31	39 3.21 18	207 9.00 50	5 0.13 1	-- 3.38 19	206 13.59 77	653 0.70 4	25 0.70 4	2.0 0.03 0	0.6	0.18	--	1170 1146	440 271	
17/68 945	70	1101	--	1550	117 5.84 33	35 2.88 16	210 9.13 51	3 0.08 0	0 0.00 0	204 3.34 18	687 14.30 78	20 0.56 3	1.6 0.02 0	0.3	--	0	1277 1175	436 269	
16W-36M04S /05/67 --	70	1101	--	1020	104 5.19 48	31 2.55 24	68 2.96 27	3 0.08 1	0 0.00 0	300 4.92 46	201 4.18 39	46 1.30 12	20.0 0.32 3	--	--	0	773 621	387 141	
17W-12R01S /03/67 --	70	1101	--	1190	118 5.89 42	45 3.70 27	96 4.17 30	3 0.08 0	26 0.87 6	226 3.70 26	420 8.74 61	28 0.79 5	12.0 0.19 1	--	--	0	974 860	479 250	
17/68 1015	70	1101	--	1230	127 6.34 44	45 3.70 26	100 4.35 30	3 0.08 0	0 0.00 0	267 4.38 30	454 9.45 64	26 0.73 5	9.8 0.16 1	0.6	--	0	1032 897	502 283	
17W-14Q01S /03/67 --	70	1101	--	1600	184 9.18 48	56 4.60 24	120 5.22 27	4 0.10 0	0 0.00 0	340 5.57 29	561 11.68 61	72 2.03 10	0.0 0.00 0	--	--	0	1337 1165	689 410	
17/68 1030	70	1101	--	1580	178 8.88 46	60 4.93 25	124 5.39 28	4 0.10 0	0 0.00 0	382 6.26 31	547 11.39 57	73 2.06 10	10.2 0.16 1	0.6	--	0	1378 1185	691 378	
17W-15N01S /03/67 --	70	1101	--	3230	15 0.75 2	3 0.25 1	764 33.23 97	1 0.02 0	24 0.80 2	318 5.21 15	933 19.42 57	308 8.68 25	0.0 0.00 0	--	--	0	2366 2205	49 0	
17/68 1100	70	1101	--	3360	15 0.75 2	1 0.08 0	764 33.23 96	16 0.41 1	0 0.00 0	335 5.49 16	986 20.53 58	325 9.16 26	1.5 0.02 0	1.9	--	0	2445 2276	41 0	
17W-22E01S /27/68 --	70	5050	69	1523	169 8.43 47	60 4.93 27	103 4.48 25	5 0.13 1	0 0.00 0	338 5.54 31	498 10.37 58	60 1.69 9	7.5 0.12 1	0.7	0.52	--	1165 1070	669 392	
17W-22E02S /03/67 --	70	1101	--	1410	121 6.04 39	57 4.69 30	110 4.78 31	4 0.10 1	0 0.00 0	200 3.28 21	523 10.89 68	56 1.58 10	12.0 0.19 1	--	--	0	1083 982	536 372	
17/68 1045	70	1101	--	1480	173 8.63 48	55 4.52 25	107 4.65 26	4 0.10 1	0 0.00 0	345 5.65 31	515 10.72 58	67 1.89 10	7.6 0.12 1	0.6	--	0	1274 1099	658 375	
17W-25B07S /18/67 1000	70	5050	64	935	81 4.04 38	37 3.04 29	77 3.35 32	4 0.10 1	-- 4.06 40	248 5.00 49	240 1.16 11	41 0.05 0	3.0 0.05 0	1.1	0.44	--	653 607	353 150	
17W-25G05S /18/67 1300	70	5050	66	1241	111 5.54 38	53 4.36 30	106 4.61 32	4 0.10 1	-- 4.26 30	260 8.14 57	391 1.78 12	63 0.18 1	11.0 0.18 1	1.2	0.53	--	926 869	497 284	
17W-36A01S /18/67 1130	70	5050	67	1153	89 4.44 34	52 4.28 32	101 4.39 33	4 0.10 1	-- 4.78 36	292 7.37 55	354 1.01 8	36 0.11 1	7.0 0.11 1	1.0	0.39	--	855 788	437 197	

MINERAL ANALYSES OF GROUND WATER

SOUTHERN CALIFORNIA

STATE WELL NO. DATE	COUNTY TIME	LAB SAMPLER	TEMP PH	EC	MINERAL CONSTITUENTS IN				MILLIGRAMS PER LITER MILLIEQUIVALENTS PER LITER PERCENT REACTANCE VALUES				MILLIGRAMS PER LITER				TOS 180C (*105C) SUM		
					CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SiO2			
SANTA CLARA-CALLEGUAS HYDRO UNIT U0300																			
UPPER SANTA CLARA R HYDRO SUBUNIT U03E0 EASTERN HYDRO SUBAREA					U03E1														
05N/17W-36G015	70	5050	66	1223	113	53	98	4	--	270	368	59	12.0	1.2	0.53	--	915		
10/18/67	1130	--	7.6		5.64	4.36	4.26	0.10		4.42	7.66	1.66	0.19				842		
					39	30	30	1		32	55	12	1						
05N/17W-36H045	70	1101	--	1070	100	41	87	4	0	252	317	54	0.0	--	--	0	855		
12/05/67	--	1101	8.1		4.99	3.37	3.78	0.10	0.00	4.13	6.60	1.52	0.00				727		
					41	27	31	1	0	34	54	12	0						
09/17/68	--	70	1101	--	1020	107	36	76	2	0	273	293	41	4.5	1.1	--	833		
					5.34	2.96	3.30	0.05	0.00	4.47	6.10	1.16	0.07				695		
					46	25	28	0	0	38	52	10	1						
ACTION HYDRO SUBAREA					U03E5														
04N/13W-12C015	70	5050	63	620	70	19	30	2	--	237	71	34	19.0	0.3	0.06	--	406		
09/27/68	--	--	7.4		3.49	1.56	1.30	0.05		3.88	1.48	0.96	0.31				362		
					54	24	20	1		59	22	14	5						
CALLEGUAS-CONEJO HYDRO SUBUNIT U03F0 WEST LAS POSAS HYDRO SUBAREA					U03F1														
02N/21W-08L015	56	5050	68	1361	100	46	137	4	0	271	381	84	7.0	0.5	0.48	--	960		
10/02/67	940	--	8.0		4.99	3.78	5.96	0.10	0.00	4.44	7.93	2.37	0.11				894		
					34	25	40	1	0	30	53	16	1						
09/26/68	--	56	5050	77	1289	113	45	113	4	--	313	341	74	10.0	0.5	0.39	--		
					5.64	3.70	4.91	0.10		5.13	7.10	2.09	0.16				855		
					39	26	34	1		35	49	14	1						
EAST LAS POSAS HYDRO SUBAREA					U03F2														
03N/20W-27G035	56	5050	68	1493	146	76	95	5	0	232	600	42	30.0	0.7	0.16	--	1170		
10/03/67	--	--	8.1		7.28	6.25	4.13	0.13	0.00	3.80	12.49	1.18	0.48				1109		
					41	35	23	1	0	21	69	7	3						
02N/20W-09H015	56	5050	74	575	59	15	43	2	--	191	96	25	11.2	0.3	0.07	--	336		
09/25/68	--	--	7.8		2.94	1.23	1.87	0.05		3.13	2.00	0.70	0.18				346		
					48	20	31	1		52	33	12	3						
03N/20W-27G035	56	5050	--	1439	141	74	90	4	0	221	560	40	33.0	0.7	0.16	--	1201		
09/25/68	--	--	7.9		7.03	6.08	3.91	0.10	0.00	3.62	11.66	1.13	0.53				1052		
					41	35	23	1	0	21	69	7	3						
ARROYO SANTA ROSA HYDRO SUBAREA					U03F3														
02N/20W-23R025	56	5050	70	1285	87	74	87	1	0	397	148	116	69.0	0.4	0.17	--	964		
09/25/68	--	--	7.9		4.34	6.08	3.78	0.02	0.00	6.51	3.08	3.27	1.11				778		
					30	43	27	0	0	47	22	23	8						
CONEJO VALLEY HYDRO SUBAREA					U03F4														
02N/20W-36R015	56	5050	71	1585	56	42	240	1	--	385	320	138	0.7	0.4	0.24	--	996		
09/25/68	--	--	7.9		2.79	3.45	10.44	0.02		6.31	6.66	3.89	0.01				988		
					17	21	62	0		37	39	23	0						
SIMI VALLEY HYDRO SUBAREA					U03F7														
02N/17W-08J065	56	5050	74	683	51	16	77	1	--	289	41	51	0.0	0.6	0.34	--	373		
09/25/68	--	--	7.8		2.54	1.31	3.35	0.02		4.74	0.85	1.44	0.00				380		
					35	18	46	0		67	12	20	0						
02N/18W-10A025	56	5050	72	2173	231	84	189	5	--	355	794	126	22.5	0.8	1.30	--	1713		
09/25/68	--	--	7.2		11.53	6.91	8.22	0.13		5.82	16.53	3.55	0.36				1629		
					43	26	31	0		22	63	13	1						
MALIBU HYDRO UNIT U0400																			
MALIBU CREEK HYDRO SUBUNIT U0480 TRIUNFO CANYON HYDRO SUBAREA					U0484														
01S/18W-05P015	70	5050	107	877	0	0	210	1	--	461	60	11	0.0	1.8	1.09	--	519		
04/07/68	1130	--	8.2		0.00	0.00	9.13	0.02		7.55	1.25	0.31	0.00				512		
					0	0	100	0		83	14	3	0						
LA-SAN GABRIEL RIVER HYDRO UNIT U0500																			
COASTAL PL OF LA CO HYDRO SUBUNIT U05A0 PALOS VERDES HYDRO SUBAREA					U05A1														
04S/14W-10J015	70	5050	74	615	44	12	72	5	--	246	8	73	0.0	0.3	0.12	--	300		
04/08/68	--	--	7.6		2.19	0.99	3.13	0.13		4.03	0.17	2.06	0.00				336		
					34	15	49	2		64	3	33	0						
WEST COAST HYDRO SUBAREA					U05A2														
02S/14W-19C015	70	1101	70	1090	83	31	115	8	0	390	133	100	0.0	--	--	0	860		
12/04/67	--	1101	8.1		4.14	2.55	5.00	0.20	0.00	6.39	2.77	2.82	0.00				662		
					35	21	42	2	0	53	23	23	0						
03/04/68	--	70	1101	--	1090	82	31	115	9	0	380	150	98	5.5	--	--	870		
					4.09	2.55	5.00	0.23	0.00	6.23	3.12	2.76	0.09				678		
					34	21	42	2	0	51	26	23	1						

TABLE E-1

MINERAL ANALYSES OF GROUND WATER

SOUTHERN CALIFORNIA

WELL NO.	COUNTY	LAB	TEMP	EC	MINERAL CONSTITUENTS IN				MILLIGRAMS PER LITER				MILLIGRAMS PER LITER				TDS 180C (*105C) SUM	TH NCH
					CA	MG	NA	K	MILLIEQUIVALENTS PER LITER PERCENT REACTANCE VALUES				NO3	F	B	SI02		
LA-SAN GABRIEL RIVER HYDRO UNIT U0500																		
COASTAL PL OF LA CO HYDRO SUBUNIT U05A0																		
WEST COAST HYDRO SUBAREA U05A2																		
75/14W-19C015	70	1101	--	1100	85	31	115	9	0	410	126	102	7.7	--	--	0	885	339
06/03/68	--	1101	7.8		4.24	2.55	5.00	0.23	0.00	6.72	2.62	2.88	0.12				678	3
					35	21	42	2	0	54	21	23	1					
09/03/68	--	1101	7.2	1100	78	32	112	9	0	394	117	99	6.8	0.4	--	0	848	326
		1101	7.5		3.89	2.63	4.87	0.23	0.00	6.46	2.43	2.79	0.11				648	3
					33	23	42	2	0	55	21	24	1					
75/14W-19C025	70	1101	7.1	1310	99	37	133	7	0	340	190	153	7.0	--	--	0	966	399
10/03/67	--	1101	--		4.94	3.04	5.78	0.18	0.00	5.57	3.95	4.31	0.11				794	120
					35	22	41	1	0	40	28	31	1					
01/03/68	--	1101	6.9	1300	94	39	124	8	0	410	156	122	2.9	--	--	0	955	395
		1101	7.6		4.69	3.21	5.39	0.20	0.00	6.72	3.25	3.44	0.05				748	59
					35	24	40	1	0	50	24	26	0					
04/01/68	--	1101	7.0	1320	97	35	147	10	0	359	191	148	8.2	--	--	0	995	386
		1101	7.7		4.84	2.88	6.39	0.25	0.00	5.88	3.98	4.17	0.13				813	92
					34	20	44	2	0	41	28	29	1					
07/02/68	--	1101	--	1230	102	35	120	7	0	410	149	124	0.0	--	--	0	947	398
		1101	7.7		5.09	2.88	5.22	0.18	0.00	6.72	3.10	3.50	0.00				739	62
					38	21	39	1	0	50	23	26	0					
09/03/68	--	1101	--	1220	90	35	124	8	0	401	135	131	5.4	0.4	--	0	929	368
		1101	7.5		4.49	2.88	5.39	0.20	0.00	6.57	2.81	3.69	0.09				726	39
					35	22	42	2	0	50	21	28	1					
75/14W-19K025	70	1101	7.0	1850	146	59	176	5	0	478	221	276	3.9	--	--	0	1364	607
11/06/67	--	1101	7.9		7.28	4.85	7.65	0.13	0.00	7.83	4.60	7.78	0.06				1122	215
					37	24	38	1	0	39	23	38	0					
02/05/68	--	1101	7.0	1850	141	64	176	7	0	500	221	272	0.0	--	--	0	1381	615
		1101	7.7		7.03	5.26	7.65	0.18	0.00	8.19	4.60	7.67	0.00				1127	205
					35	26	38	1	0	40	22	37	0					
05/06/68	--	1101	6.9	1850	148	58	182	7	0	511	213	268	2.3	--	--	0	1389	608
		1101	8.0		7.38	4.77	7.92	0.18	0.00	8.37	4.43	7.56	0.04				1130	189
					36	23	39	1	0	41	22	37	0					
08/06/68	--	1101	7.2	1530	119	47	152	7	--	454	179	202	4.2	--	--	0	1164	490
		1101	7.7		5.94	3.86	6.61	0.18		7.44	3.73	5.70	0.07				934	118
					36	23	40	1		44	22	34	0					
09/03/68	--	1101	7.0	1890	151	61	182	5	0	457	229	288	2.2	0.3	--	0	1375	628
		1101	7.5		7.53	5.02	7.92	0.13	0.00	7.49	4.77	8.12	0.03				1144	253
					37	24	38	1	0	37	23	40	0					
75/14W-19K035	70	1101	7.4	1050	79	32	107	7	0	392	111	100	7.9	--	--	0	835	328
11/06/67	--	1101	8.2		3.94	2.63	4.65	0.18	0.00	6.42	2.31	2.82	0.13				637	6
					35	23	41	2	0	55	20	24	1					
02/05/68	--	1101	7.0	1200	97	35	115	9	0	424	130	128	4.2	--	--	0	942	386
		1101	7.8		4.84	2.88	5.00	0.23	0.00	6.95	2.71	3.61	0.07				727	38
					37	22	39	2	0	52	20	27	0					
05/06/68	--	1101	7.2	1130	84	34	115	9	0	416	118	108	4.2	--	--	0	888	349
		1101	7.7		4.19	2.80	5.00	0.23	0.00	6.82	2.46	3.04	0.07				677	8
					34	23	41	2	0	55	20	25	0					
08/05/68	--	1101	7.7	1140	93	32	120	8	--	418	120	113	7.5	--	--	0	911	363
		1101	7.9		4.64	2.63	5.22	0.20		6.85	2.50	3.19	0.12				699	20
					36	21	41	2		54	20	25	1					
09/03/68	--	1101	7.2	1120	82	33	103	8	0	394	117	98	4.8	0.4	--	0	840	340
		1101	7.6		4.09	2.71	4.48	0.20	0.00	6.46	2.43	2.76	0.08				640	17
					36	24	39	2	0	55	21	23	1					
75/15W-140025	70	1101	7.1	1380	117	47	132	2	0	450	230	126	4.0	--	--	0	1108	485
10/03/67	--	1101	--		5.84	3.86	5.74	0.05	0.00	7.37	4.79	3.55	0.06				880	116
					38	25	37	0	0	47	30	22	0					
11/07/67	--	1101	7.0	1460	127	50	133	2	0	454	222	122	47.9	--	--	0	1157	522
		1101	7.7		6.34	4.11	5.78	0.05	0.00	7.44	4.62	3.44	0.77				928	150
					39	25	35	0	0	46	28	21	5					
02/04/67	--	1101	5.9	1460	127	50	133	4	0	462	218	123	47.2	--	--	0	1164	522
		1101	7.6		6.34	4.11	5.78	0.10	0.00	7.57	4.54	3.47	0.76				930	143
					39	25	35	1	0	46	28	21	5					
01/03/68	--	1101	5.4	1450	97	51	133	4	0	388	220	121	40.9	--	--	0	1054	452
		1101	8.3		4.84	4.19	5.78	0.10	0.00	6.36	4.58	3.41	0.66				858	134
					32	28	39	1	0	42	30	23	4					
02/05/68	--	1101	5.6	1430	126	50	128	4	0	486	215	116	35.7	--	--	0	1160	520
		1101	7.8		6.29	4.11	5.57	0.10	0.00	7.96	4.48	3.27	0.57				914	121
					39	26	35	1	0	49	27	20	3					
03/04/68	--	1101	6.1	1440	132	50	128	3	0	496	205	122	42.3	--	--	0	1178	535
		1101	7.8		6.59	4.11	5.57	0.08	0.00	8.13	4.27	3.44	0.68				927	128
					40	25	34	0	0	49	26	21	4					

TABLE E-1

MINERAL ANALYSES OF GROUND WATER

SOUTHERN CALIFORNIA

STATE WELL NO. DATE	COUNTY TIME	LAB SAMPLER	TEMP PH	EC	MINERAL CONSTITUENTS IN				MILLIGRAMS PER LITER MILLIEQUIVALENTS PER LITER PERCENT REACTANCE VALUES				MILLIGRAMS PER LITER				TDS 180C (*105C) SUM			
					CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SI02				
					LA-SAN GABRIEL RIVER HYDRO UNIT U0500															
COASTAL PL OF LA CO HYDRO SUBUNIT U05A0 WEST COAST HYDRO SUBAREA U05A2																				
02S/15W-14Q02S 04/01/68	--	70	1101	60 7.5	1470	129 6.44 39	51 4.19 26	128 5.57 34	4 0.10 1	0 0.00 0	476 7.80 47	218 4.54 27	122 3.44 21	58.7 0.95 6	--	--	0	1186 945	5 1	
05/06/68	--	70	1101	64 7.6	1500	136 6.79 40	50 4.11 24	138 6.00 35	4 0.10 1	0 0.00 0	505 8.28 48	226 4.70 27	120 3.38 20	49.0 0.79 5	--	--	0	1228 972	5 1	
06/03/68	--	70	1101	69 7.6	1480	129 6.44 39	50 4.11 25	133 5.78 35	3 0.08 0	0 0.00 0	451 7.39 45	239 4.97 30	123 3.47 21	45.5 0.73 4	--	--	0	1173 945	5 1	
07/02/68	--	70	1101	-- 7.6	1510	134 6.69 40	50 4.11 25	133 5.78 35	4 0.10 1	0 0.00 0	503 8.24 47	243 5.06 29	124 3.50 20	44.5 0.72 4	--	--	0	1235 980	5 1	
08/05/68	--	70	1101	72 7.3	1500	133 6.64 39	50 4.11 24	138 6.00 36	3 0.08 0	-- 7.59 44	463 5.12 30	246 3.69 21	131 3.69 21	50.2 0.81 5	--	--	0	1216 979	5 1	
09/03/68	--	70	1101	73 7.5	1470	132 6.59 40	48 3.95 24	134 5.83 35	2 0.05 0	0 0.00 0	460 7.54 45	228 4.75 29	126 3.55 21	47.3 0.76 5	0.4	--	0	1177 944	5 1	
02S/15W-23A06S 04/03/68	820	70	5050	63 7.9	2483	163 8.13 30	85 6.99 25	276 12.00 44	9 0.23 1	-- 5.62 20	343 8.99 33	432 12.69 46	450 0.05 0	3.0 0.05 0	0.8	0.93	--	1659 1589	7 4	
02S/15W-23C05S 12/12/67	--	70	1101	65 8.2	3570	288 14.37 33	119 9.79 22	440 19.14 44	5 0.13 0	0 0.00 0	408 6.69 15	950 19.78 46	424 11.96 28	286.0 4.61 11	--	--	0	2920 2713	17 4	
04/11/68	--	70	1101	69 6.9	2690	255 12.72 40	100 8.22 26	240 10.44 33	6 0.15 0	0 0.00 0	492 8.06 25	667 13.89 43	300 8.46 26	94.4 1.52 5	--	--	0	2154 1905	1 4	
02S/15W-23D01S 04/03/68	830	70	5050	63 7.5	4613	280 13.97 29	111 9.13 19	570 24.79 51	8 0.20 0	-- 7.33 15	414 8.62 18	1107 31.22 64	79.0 1.27 3	0.9	2.06	--	3051 2792	1 4		
02S/15W-23N01S 10/03/67	--	70	1101	68 8.5	6200	381 19.01 28	216 17.76 26	690 30.01 45	7 0.18 0	0 0.00 0	588 9.64 14	836 17.40 26	1400 39.48 59	5.0 0.08 0	--	--	0	4123 3825	1 4	
11/07/67	--	70	1101	69 7.7	7740	496 24.75 29	301 24.75 29	810 35.23 41	5 0.13 0	0 0.00 0	524 8.59 10	851 17.72 21	2040 57.53 69	4.2 0.07 0	--	--	0	5031 4765	2 4	
12/04/67	--	70	1101	61 8.2	3560	248 12.37 30	129 10.61 26	420 18.27 44	5 0.13 0	0 0.00 0	682 11.18 27	596 12.41 30	614 17.31 42	44.3 0.71 2	--	--	0	2738 2392	1 4	
01/03/68	--	70	1101	65 7.6	3590	252 12.57 31	136 11.18 27	392 17.05 42	8 0.20 0	0 0.00 0	647 10.60 26	581 12.10 29	648 18.27 45	0.0 0.00 0	--	--	0	2664 2336	1 4	
02/05/68	--	70	1101	65 7.5	3990	272 13.57 30	137 11.27 25	460 20.01 44	9 0.23 0	0 0.00 0	587 9.62 21	688 14.32 32	752 21.21 47	4.4 0.07 0	--	--	0	2909 2611	1 4	
03/04/68	--	70	1101	65 7.6	3820	264 13.17 30	131 10.77 24	460 20.01 45	10 0.25 1	0 0.00 0	594 9.73 22	719 14.97 33	712 20.08 45	4.5 0.07 0	--	--	0	2894 2593	1 4	
04/01/68	--	70	1101	60 7.1	3290	230 11.48 30	116 9.54 25	382 16.62 44	8 0.20 0	0 0.00 0	689 11.29 30	558 11.62 31	520 14.66 39	14.8 0.24 1	--	--	0	2518 2168	1 4	
04/03/68	730	70	5050	61 7.3	3274	224 11.18 30	133 10.94 29	345 15.01 40	7 0.18 0	-- 10.98 30	516 10.74 29	532 15.00 41	13.0 0.21 1	0.8	1.12	--	2228 2102	1 4		
06/03/68	--	70	1101	76 7.9	3930	244 12.17 28	134 11.02 25	470 20.44 47	9 0.23 0	0 0.00 0	503 8.24 19	747 15.55 35	708 19.96 45	6.0 0.10 0	--	--	0	2821 2566	1 4	
07/02/68	--	70	1101	67 7.4	3910	248 12.37 27	135 11.10 25	490 21.31 47	9 0.23 0	0 0.00 0	565 9.26 20	774 16.11 35	706 19.91 44	2.7 0.04 0	--	--	0	2929 2643	7 11	
08/05/68	--	70	1101	67 7.8	4030	249 12.42 27	138 11.35 25	512 22.27 48	6 0.15 0	-- 9.54 20	780 16.24 35	750 21.15 45	2.2 0.03 0	--	--	0	3019 2724	8 12		
03S/13W-19K02S 09/30/68	--	70	5050	69 7.8	710	65 3.24 45	21 1.73 24	47 2.04 29	5 0.13 2	-- 4.01 55	72 1.50 21	60 1.69 23	4.0 0.06 1	0.3	0.10	--	411 395	4 4		
03S/13W-29D06S 09/30/68	--	70	5050	72 7.7	454	36 1.80 38	12 0.99 21	41 1.78 38	4 0.10 2	-- 3.59 77	0 0.00 0	36 1.01 22	3.0 0.05 1	0.2	0.06	--	220 240	3 4		

TABLE E-1
MINERAL ANALYSES OF GROUND WATER

SOUTHERN CALIFORNIA

WELL NO. DATE	COUNTY	LAB SAMPLER	TEMP PH	EC	MILLIGRAMS PER LITER MINERAL CONSTITUENTS IN MILLIEQUIVALENTS PER LITER PERCENT REACTANCE VALUES										MILLIGRAMS PER LITER				TDS 180C (*105C) SUM	TH NCH
					CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SI02				
GENERAL PL OF LA CO HYDRO SUBUNIT U05A0 WEST COAST HYDRO SUBAREA U05A2					LA-SAN GABRIEL RIVER HYDRO UNIT U0500															
13W-29G03S 01/68 1030	70	5050	74 7.6	412	27 1.35 32	8 0.66 15	50 2.17 51	3 0.08 2	--	220 3.60 84	0 0.00 0	25 0.70 16	0.0 0.00 0	0.2	0.11	--	223 222	100 0		
13W-32E02S 02/68 820	70	5050	-- 8.0	631	64 3.19 47	17 1.40 21	48 2.09 31	3 0.08 1	--	218 3.57 53	108 2.25 34	31 0.87 13	0.0 0.00 0	0.3	0.11	--	376 379	230 51		
14W-07K05S 03/68 --	70	5050	75 8.1	938	44 2.19 22	26 2.14 22	119 5.18 52	14 0.36 4	0 0.00 0	461 7.55 76	5 0.10 1	80 2.26 23	1.0 0.02 0	0.4	0.38	--	538 517	217 0		
14W-21M01S 08/68 --	70	1101	75 7.4	829	41 2.04 35	12 0.99 17	60 2.61 45	5 0.13 2	0 0.00 0	291 4.77 81	8 0.17 3	32 0.90 15	2.9 0.05 1	0.4	--	0	452 305	151 0		
14W-22K01S 01/68 1015	70	5050	72 7.9	543	40 1.99 34	20 1.64 28	48 2.09 36	4 0.10 2	--	232 3.80 67	41 0.85 15	36 1.01 18	0.0 0.00 0	0.3	0.14	--	285 304	182 0		
14W-22Q01S 02/68 --	70	5868	77 8.0	527	49 2.44 42	13 1.07 18	50 2.17 37	4 0.10 2	--	242 3.97 68	42 0.87 15	34 0.96 16	0.0 0.00 0	0.5	0.08	31	343 343	176 0		
14W-22R02S 01/68 1030	70	5050	-- 7.9	687	62 3.09 44	18 1.48 21	54 2.35 33	4 0.10 1	--	227 3.72 54	38 0.79 11	83 2.34 34	0.0 0.00 0	0.3	0.14	--	381 371	229 43		
14W-22R02S 02/68 --	70	5868	77 7.6	1640	152 7.58 48	42 3.45 22	106 4.61 29	7 0.18 1	--	203 3.33 21	41 0.85 5	417 11.76 74	0.0 0.00 0	0.2	0.17	18	884 884	552 386		
14W-25K04S 01/68 1130	70	5050	-- 8.0	519	53 2.64 48	12 0.99 18	41 1.78 32	3 0.08 1	--	222 3.64 68	36 0.75 14	34 0.96 18	0.0 0.00 0	0.4	0.13	--	284 289	182 0		
14W-27C01S 01/68 1000	70	5050	69 8.1	935	87 4.34 45	24 1.97 21	72 3.13 33	4 0.10 1	--	234 3.83 40	53 1.10 12	163 4.60 48	0.0 0.00 0	0.2	0.11	--	504 519	316 124		
14W-29P03S 06/68 --	70	5050	-- 8.3	1190	34 1.70 15	14 1.15 10	195 8.48 74	4 0.10 1	5 0.17 1	138 2.26 20	290 6.04 53	101 2.85 25	0.5 0.01 0	0.5	0.12	--	711 712	142 21		
14W-30H02S 06/68 --	70	5050	-- 7.7	1236	86 4.29 35	50 4.11 33	86 3.74 30	5 0.13 1	--	208 3.41 29	80 1.66 14	243 6.85 57	0.0 0.00 0	0.4	0.10	--	790 653	420 242		
14W-35M06S 01/68 --	70	5050	-- 6.3	1346	33 1.65 21	48 3.95 50	48 2.09 26	10 0.25 3	0 0.00 0	49 0.80 7	278 5.79 49	27 0.76 6	282.0 4.55 38	0.5	0.04	--	738 751*	280 240		
12W-34J02S 07/68 --	70	1101	-- 7.7	345	11 0.55 14	1 0.08 2	72 3.13 83	1 0.02 1	0 0.00 0	157 2.57 70	28 0.58 16	18 0.51 14	0.0 0.00 0	--	--	0	288 209	31 0		
13W-10E03S 03/68 1120	70	5050	71 8.1	682	46 2.29 32	26 2.14 29	63 2.74 38	3 0.08 1	--	249 4.08 56	86 1.79 25	49 1.38 19	2.0 0.03 0	0.4	0.12	--	411 398	222 18		
13W-19J06S 09/68 --	70	5050	75 7.8	439	28 1.40 31	9 0.74 16	51 2.22 49	5 0.13 3	--	217 3.56 81	0 0.00 0	29 0.82 19	2.0 0.03 1	0.3	0.07	--	232 232	107 0		
13W-22E01S 03/68 1630	70	5050	79 7.9	404	21 1.05 26	5 0.41 10	59 2.57 63	2 0.05 1	--	196 3.21 78	3 0.06 1	29 0.82 20	0.5 0.01 0	0.3	0.12	--	208 217	73 0		
13W-27A02S 04/67 --	70	1101	70 8.4	4240	294 14.67 35	71 5.84 14	480 20.88 50	2 0.05 0	0 0.00 0	300 4.92 12	286 5.95 14	1100 31.02 74	6.0 0.10 0	--	--	0	2539 2387	1026 780		
13W-27A02S 07/67 --	70	1101	67 7.9	3890	240 11.98 31	77 6.33 16	460 20.01 52	11 0.28 1	0 0.00 0	130 2.13 5	295 6.14 16	1080 30.46 78	10.0 0.16 0	--	--	0	2303 2237	916 809		
13W-27A02S 06/67 --	70	1101	-- 7.9	3960	236 11.78 30	77 6.33 16	480 20.88 53	14 0.36 1	0 0.00 0	130 2.13 5	323 6.72 17	1096 30.91 78	3.5 0.06 0	--	--	0	2359 2294	906 799		
13W-27A02S 05/68 --	70	1101	64 7.8	4110	232 11.58 28	76 6.25 15	530 23.05 56	16 0.41 1	0 0.00 0	178 2.92 7	316 6.58 16	1116 31.47 77	6.0 0.10 0	--	--	0	2470 2380	892 746		
13W-27A02S 05/68 --	70	1101	70 7.6	4160	346 17.26 40	76 6.25 14	440 19.14 44	15 0.38 1	0 0.00 0	322 5.28 12	320 6.66 15	1110 31.30 72	4.3 0.07 0	--	--	0	2633 2470	1176 912		
13W-27A02S 03/68 --	70	1101	70 7.5	4190	350 17.46 40	78 6.41 15	432 18.79 44	16 0.41 1	0 0.00 0	421 6.90 16	321 6.68 15	1050 29.61 68	8.3 0.13 0	--	--	0	2677 2463	1195 850		

TABLE E-1

MINERAL ANALYSES OF GROUND WATER

SOUTHERN CALIFORNIA

STATE WELL NO. DATE	COUNTY TIME	LAB SAMPLER	TEMP PH	EC	MINERAL	MILLIGRAMS PER LITER MILLIEQUIVALENTS PER LITER PERCENT REACTANCE VALUES													TDS 180C (*105C) SUM
						CONSTITUENTS IN													
						CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SI02		
LA-SAN GABRIEL RIVER HYDRO UNIT U0500																			
COASTAL PL OF LA CO HYDRO SUBUNIT U05A0																			
WEST COAST HYDRO SUBAREA U05A2																			
04S/13W-27A02S	70	1101	--	4260	348	82	460	20	0	442	321	1090	4.2	--	--	0	2767		
05/07/68 --		1101	7.7		17.36	6.74	20.01	0.51	0.00	7.24	6.68	30.74	0.07				2543		
					39	15	45	1	0	16	15	69	0						
06/05/68 --	70	1101	--	4340	342	75	480	15	0	414	341	1100	10.2	--	--	0	2777		
		1101	6.5		17.06	6.17	20.88	0.38	0.00	6.78	7.10	31.02	0.16				2567		
					38	14	47	1	0	15	16	69	0						
07/09/68 --	70	1101	71	4390	340	85	496	16	0	426	366	1128	9.0	--	--	0	2866		
		1101	7.8		16.97	6.99	21.57	0.41	0.00	6.98	7.62	31.81	0.14				2650		
					37	15	47	1	0	15	16	68	0						
09/17/68 --	70	1101	72	4420	402	74	460	9	0	373	425	1138	3.2	0.4	--	0	2885		
		1101	7.3		20.06	6.08	20.01	0.23	0.00	6.11	8.85	32.09	0.05				2695		
					43	13	43	0	0	13	19	68	0						
04S/14W-01F02S	70	5050	70	448	34	11	45	4	--	177	40	27	0.5	0.3	0.40	--	252		
04/04/68 1530		--	8.0		1.70	0.90	1.96	0.10		2.90	0.83	0.76	0.01				250		
					36	19	42	2		64	18	17	0						
04S/14W-03L02S	70	5050	70	667	60	17	57	4	--	238	43	74	0.5	0.3	0.11	--	364		
04/08/68 1030		--	8.1		2.99	1.40	2.48	0.10		3.90	0.89	2.09	0.01				373		
					43	20	35	1		57	13	30	0						
04S/14W-10D02S	70	5050	73	515	36	13	52	5	--	243	3	48	0.0	0.3	0.10	--	289		
09/30/68 --		--	7.9		1.80	1.07	2.26	0.13		3.98	0.06	1.35	0.00				277		
					34	20	43	2		74	1	25	0						
04S/14W-11F01S	70	5050	72	921	71	26	83	6	--	256	44	145	1.5	0.1	0.20	--	513		
04/10/68 1000		--	8.0		3.54	2.14	3.61	0.15		4.19	0.92	4.09	0.02				503		
					37	23	38	2		45	10	44	0						
04S/14W-16L04S	70	5050	--	948	53	18	122	5	--	300	22	141	2.0	0.2	0.16	--	484		
04/08/68 735		--	7.6		2.64	1.48	5.31	0.13		4.92	0.46	3.98	0.03				511		
					28	15	55	1		52	5	42	0						
04S/14W-17M02S	70	1101	--	1120	74	22	120	6	0	292	11	218	0.0	--	--	0	743		
03/04/68 --		1101	8.0		3.69	1.81	5.22	0.15	0.00	4.78	0.23	6.15	0.00				595		
					34	17	48	1	0	43	2	55	0						
04S/14W-35F02S	70	5050	--	1511	117	39	168	7	--	407	229	171	0.0	0.4	0.42	--	971		
04/08/68 1430		--	7.8		5.84	3.21	7.31	0.18		6.67	4.77	4.82	0.00				932		
					35	19	44	1		41	29	30	0						
05S/13W-02G03S	70	1101	70	40600	486	990	8000	284	0	282	2090	14840	17.8	--	--	0	26990		
02/08/68 --		1101	8.0		24.25	81.42	348.00	7.26	0.00	4.62	43.51	418.49	0.29				26847		
					5	18	75	2	0	1	9	90	0						
04/03/68 --	70	1101	68	42100	488	1080	8040	320	0	239	2157	15200	19.7	--	--	0	27543		
		1101	7.2		24.35	88.82	349.74	8.18	0.00	3.92	44.91	428.64	0.32				27423		
					5	19	74	2	0	1	9	90	0						
09/18/68 --	70	1101	69	40000	516	997	7995	398	0	259	2190	14603	13.8	--	--	0	26972		
		1101	6.7		25.75	81.99	347.78	10.18	0.00	4.24	45.59	411.80	0.22				26841		
					5	18	75	2	0	1	10	89	0						
05S/13W-02L02S	70	1101	67	47200	509	1121	9750	507	0	401	2420	17740	24.7	--	--	0	32473		
09/18/68 --		1101	6.9		25.40	92.19	424.12	12.97	0.00	6.57	50.38	500.27	0.40				32269		
					5	17	76	2	0	1	9	90	0						
05S/13W-03C01S	70	1101	70	43900	552	1140	8780	410	0	253	2180	16420	30.4	--	--	0	29766		
09/18/68 --		1101	7.4		27.54	93.75	381.93	10.49	0.00	4.15	45.39	463.04	0.49				29637		
					5	18	74	2	0	1	9	90	0						
05S/13W-03D08S	70	1101	74	36500	528	810	7098	304	0	483	1570	13258	0.3	--	--	0	24070		
09/18/68 --		1101	7.4		26.35	66.61	308.76	7.78	0.00	7.92	32.69	373.87	0.00				23806		
					6	16	75	2	0	2	8	90	0						
05S/13W-03P15S	70	1101	75	40700	486	752	8385	374	0	708	1280	15065	13.0	--	--	0	27116		
09/18/68 --		1101	7.1		24.25	61.84	364.75	9.57	0.00	11.60	26.65	424.83	0.21				26704		
					5	13	79	2	0	2	6	92	0						
05S/13W-04N01S	70	1101	70	31400	383	748	6120	257	0	542	1490	11086	0.0	--	--	0	20631		
09/18/68 --		1101	7.6		19.11	61.51	266.22	6.57	0.00	8.88	31.02	312.62	0.00				20351		
					5	17	75	2	0	2	9	89	0						
05S/13W-06D01S	70	1101	87	2050	16	9	480	11	0	514	76	440	26.0	--	--	0	1572		
10/03/67 --		1101	--		0.80	0.74	20.88	0.28	0.00	8.42	1.58	12.41	0.42				1311		
					3	3	92	1	0	37	7	54	2						
12/06/67 --	70	1101	85	2130	28	15	430	13	0	466	16	464	19.2	--	--	0	1451		
		1101	8.3		1.40	1.23	18.70	0.33	0.00	7.64	0.33	13.08	0.31				1215		
					6	6	86	1	0	36	2	61	1						
01/03/68 --	70	1101	86	2120	28	14	420	13	0	456	16	464	16.1	--	--	0	1427		
		1101	8.4		1.40	1.15	18.27	0.33	0.00	7.47	0.33	13.08	0.26				1196		
					7	5	86	2	0	35	2	62	1						
02/05/68 --	70	1101	87	2090	30	12	450	14	0	534	39	448	1.9	--	--	0	1534		
		1101	8.0		1.50	0.99	19.57	0.36	0.00	8.75	0.81	12.63	0.03				1258		
					7	4	87	2	0	39	4	57	0						

TABLE E-1

MINERAL ANALYSES OF GROUND WATER

SOUTHERN CALIFORNIA

WELL NO. DATE	COUNTY	LAB SAMPLER	TEMP PH	EC	MILLIGRAMS PER LITER MILLIEQUIVALENTS PER LITER PERCENT REACTANCE VALUES										TDS 180C (*105C) SUM	TH NCH		
					CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F			B	SI02
LA-SAN GABRIEL RIVER HYDRO UNIT U0500																		
CISTAL PL OF LA CO HYDRO SUBUNIT U05A0																		
WEST COAST HYDRO SUBAREA U05A2																		
13W-06D01S /05/68	70	1101	-- 7.7	2090	30 1.50 7	13 1.07 5	420 18.27 86	13 0.33 2	0 0.00 0	482 7.90 37	35 0.73 3	446 12.58 59	13.7 0.22 1	--	--	0	1452 1208	128 0
13W-01/68	70	1101	86 7.7	2080	31 1.55 7	12 0.99 4	460 20.01 87	15 0.38 2	0 0.00 0	540 8.85 39	66 1.37 6	440 12.41 54	13.3 0.21 1	--	--	0	1577 1303	126 0
13W-07/68	70	1101	88 8.4	2130	32 1.60 7	11 0.90 4	450 19.57 87	14 0.36 2	10 0.33 1	530 8.69 39	34 0.71 3	440 12.41 55	22.8 0.37 2	--	--	0	1543 1275	125 0
13W-05/68 1200	70	1101	-- 8.4	2130	26 1.30 6	12 0.99 4	440 19.14 88	13 0.33 1	0 0.00 0	532 8.72 39	28 0.58 3	448 12.63 57	17.7 0.28 1	--	--	0	1516 1247	114 0
13W-09/68	70	1101	88 8.3	2110	18 0.90 4	14 1.15 5	440 19.14 89	14 0.36 2	0 0.00 0	518 8.49 39	33 0.69 3	444 12.52 57	12.8 0.21 1	--	--	0	1493 1231	102 0
13W-17/68	70	1101	87 7.7	2080	32 1.60 8	12 0.99 5	410 17.83 86	9 0.23 1	0 0.00 0	514 8.42 41	19 0.39 2	419 11.81 57	0.0 0.00 0	1.1	--	0	1418 1155	129 0
13W-18/68	70	1101	62 7.2	49500	480 23.95 4	1214 99.84 17	10374 451.27 77	542 13.86 2	0 0.00 0	213 3.49 1	2780 57.88 10	18834 531.12 90	0.0 0.00 0	--	--	0	34438 34329	6195 6020
13W-18/68	70	1101	64 7.3	50000	446 22.25 4	1230 101.15 17	10600 461.10 77	566 14.48 2	0 0.00 0	218 3.57 1	2890 60.17 10	18903 533.06 89	0.0 0.00 0	--	--	0	34854 34743	6176 5997
13W-18/68	70	1101	69 7.4	51000	792 39.52 6	1248 102.63 17	10647 463.14 75	382 9.77 2	0 0.00 0	438 7.18 1	2730 56.84 9	19733 556.47 90	0.0 0.00 0	--	--	0	35972 35748	7114 6755
SANTA MONICA HYDRO SUBAREA U05A3																		
14W-30/68	70	5050	74 7.7	979	59 2.94 28	36 2.96 28	99 4.31 41	7 0.18 2	0 0.00 0	382 6.26 60	98 2.04 19	77 2.17 21	1.0 0.02 0	0.5	0.20	--	590 566	295 0
15W-30/68	70	5050	69 7.4	967	82 4.09 41	42 3.45 34	56 2.43 24	3 0.08 1	0 0.00 0	264 4.33 43	150 3.12 31	82 2.31 23	20.0 0.32 3	0.4	0.04	--	628 566	378 161
15W-04/67	70	1101	-- 8.4	1470	73 3.64 23	38 3.12 20	196 8.52 55	12 0.31 2	0 0.00 0	402 6.59 42	137 2.85 18	172 4.85 31	78.0 1.26 8	--	--	0	1108 904	338 8
15W-04/68 1030	70	1101	-- 8.0	1160	94 4.69 37	40 3.29 26	107 4.65 36	7 0.18 1	0 0.00 0	369 6.05 47	210 4.37 34	86 2.42 19	0.0 0.00 0	--	--	0	913 726	399 96
15W-01/68	70	1101	-- 7.7	1090	98 4.89 41	35 2.88 24	94 4.09 34	7 0.18 1	0 0.00 0	356 5.83 48	219 4.56 37	66 1.86 15	0.0 0.00 0	--	--	0	875 694	388 96
15W-04/68	70	1101	-- 7.6	1460	76 3.79 24	39 3.21 20	200 8.70 54	11 0.28 2	0 0.00 0	451 7.39 47	180 3.75 24	160 4.51 28	12.7 0.20 1	--	--	0	1129 901	350 0
15W-05/68	70	1101	-- 7.6	1420	80 3.99 28	40 3.29 23	152 6.61 47	9 0.23 2	0 0.00 0	388 6.36 44	200 4.16 29	130 3.67 26	8.6 0.14 1	0.4	--	0	1008 811	364 46
15W-30/68	70	5050	73 7.8	1693	171 8.53 44	67 5.51 29	113 4.91 26	9 0.23 1	0 0.00 0	380 6.23 32	463 9.64 50	118 3.33 17	2.0 0.03 0	0.6	0.20	--	1286 1131	703 391
CENTRAL HYDRO SUBAREA U05A5																		
11W-19/67	70	5868	75 7.5	827	105 5.24 61	20 1.64 19	38 1.65 19	4 0.10 1	-- 0.00 0	238 3.90 45	142 2.96 34	56 1.58 18	16.0 0.26 3	0.3	0.02	18	516 517	344 149
11W-23/68	70	1101	66 7.3	907	106 5.29 54	18 1.48 15	69 3.00 30	4 0.10 1	0 0.00 0	231 3.79 38	208 4.33 43	58 1.63 16	14.6 0.23 2	0.4	--	0	709 592	338 148
11W-17/67	70	1101	63 --	978	96 4.79 46	21 1.73 16	88 3.83 37	4 0.10 1	0 0.00 0	200 3.28 31	233 4.85 46	80 2.26 21	14.0 0.22 2	--	--	0	736 635	326 162
11W-30/68	70	1101	65 7.7	942	107 5.34 52	20 1.64 16	71 3.09 30	5 0.13 1	0 0.00 0	195 3.20 30	226 4.70 45	86 2.42 23	9.3 0.15 1	--	--	0	719 621	349 189
11W-17/67	70	1101	65 8.7	852	86 4.29 48	21 1.73 19	66 2.87 32	4 0.10 1	0 0.00 0	174 2.85 31	196 4.08 44	68 1.92 21	19.5 0.31 3	--	--	0	634 546	301 158

TABLE E-1

MINERAL ANALYSES OF GROUND WATER

SOUTHERN CALIFORNIA

STATE WELL NO. DATE	COUNTY TIME	LAB SAMPLER	TEMP PH	EC	MINERAL CONSTITUENTS IN				MILLIGRAMS PER LITER MILLIEQUIVALENTS PER LITER PERCENT REACTANCE VALUES				MILLIGRAMS PER LITER			TDS 180C (*105C) SUM	
					CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B		SiO2
LA-SAN GABRIEL RIVER HYDRO UNIT U0500																	
COASTAL PL OF LA CO HYDRO SUBUNIT U05A0																	
CENTRAL HYDRO SUBAREA U05A5																	
02S/12W-01M01S 06/19/68 --	70	1101	78 7.5	847	80 3.99 43	22 1.81 20	76 3.30 36	4 0.10 1	0 0.00 0	274 4.49 48	151 3.14 34	49 1.38 15	19.5 0.31 3	0.4	--	0	675 537
02S/12W-01R02S 04/15/68 1100	70	5050	67 8.4	1240	34 1.70 15	12 0.99 9	200 8.70 76	5 0.13 1	2 0.07 1	147 2.41 20	308 6.41 54	101 2.85 24	1.4 0.02 0	0.4	0.20	--	750 737
02S/12W-07C02S 07/15/68 915	70	1101	-- 8.1	621	55 2.74 41	15 1.23 18	60 2.61 39	4 0.10 1	0 0.00 0	232 3.80 56	60 1.25 18	54 1.52 22	11.0 0.18 3	--	--	0	491 374
02S/12W-09M02S 07/15/68 830	70	1101	-- 8.2	823	58 2.89 34	20 1.64 19	90 3.91 46	4 0.10 1	0 0.00 0	259 4.24 48	85 1.77 20	98 2.76 31	0.0 0.00 0	--	--	0	614 483
02S/12W-10K03S 10/19/67 --	70	1101	-- 8.5	628	66 3.29 49	13 1.07 16	52 2.26 34	2 0.05 1	0 0.00 0	250 4.10 60	47 0.98 14	60 1.69 25	0.0 0.00 0	--	--	0	490 363
07/15/68 845	70	1101	-- 8.0	593	63 3.14 50	10 0.82 13	50 2.17 35	4 0.10 2	0 0.00 0	224 3.67 59	58 1.21 19	48 1.35 22	0.0 0.00 0	--	--	0	457 344
02S/12W-12M02S 09/10/68 --	70	1101	72 7.6	925	108 5.39 54	18 1.48 15	71 3.09 31	3 0.08 1	0 0.00 0	217 3.56 35	179 3.73 37	93 2.62 26	11.0 0.18 2	0.4	--	0	700 591
02S/12W-13O07S 08/20/68 --	70	1101	67 7.8	952	98 4.89 49	18 1.48 15	81 3.52 35	2 0.05 0	0 0.00 0	187 3.06 30	222 4.62 45	85 2.40 23	11.3 0.18 2	0.3	--	0	704 610
02S/12W-13L05S 12/19/67 --	70	5868	75 7.6	916	96 4.79 53	17 1.40 15	62 2.70 30	4 0.10 1	-- 2.97 33	181 3.87 43	186 2.03 22	72 0.19 2	12.0 0.19 2	0.4	0.06	17	556 556
02S/12W-14R08S 08/26/68 --	70	1101	72 7.4	982	90 4.49 44	19 1.56 15	94 4.09 40	5 0.13 1	0 0.00 0	181 2.97 28	232 4.83 46	86 2.42 23	11.4 0.18 2	0.5	--	0	718 627
02S/12W-21J01S 10/17/67 --	70	1101	66 --	888	102 5.09 54	20 1.64 17	60 2.61 28	3 0.08 1	0 0.00 0	195 3.20 33	203 4.23 44	78 2.20 23	0.0 0.00 0	--	--	0	661 562
07/17/68 --	70	1101	-- 7.9	899	109 5.44 56	17 1.40 14	62 2.70 28	4 0.10 1	0 0.00 0	201 3.29 33	210 4.37 43	79 2.23 22	11.6 0.19 2	--	--	0	693 592
02S/12W-24E06S 12/19/67 --	70	5868	75 7.3	933	91 4.54 49	18 1.48 16	71 3.09 33	4 0.10 1	-- 2.70 29	165 4.37 47	210 1.97 21	70 0.16 2	10.0 0.16 2	0.5	0.11	16	576 572
02S/12W-25E01S 12/19/67 --	70	5868	75 7.5	996	115 5.74 57	15 1.23 12	70 3.04 30	4 0.10 1	-- 2.56 25	156 5.14 51	247 2.37 23	84 0.08 1	5.0 0.08 1	0.4	0.04	17	635 635
02S/12W-25E06S 10/17/67 --	70	1101	65 8.5	971	102 5.09 49	23 1.89 18	76 3.30 32	4 0.10 1	0 0.00 0	161 2.64 25	249 5.18 50	88 2.48 24	6.0 0.10 1	--	--	0	709 628
07/17/68 --	70	1101	63 8.3	973	113 5.64 52	22 1.81 17	72 3.13 29	6 0.15 1	0 0.00 0	207 3.39 31	239 4.97 46	80 2.26 21	13.0 0.21 2	--	--	0	752 647
02S/12W-25G01S 10/17/67 --	70	1101	69 --	947	106 5.29 52	19 1.56 15	72 3.13 31	4 0.10 1	0 0.00 0	178 2.92 28	238 4.95 48	84 2.37 23	6.0 0.10 1	--	--	0	707 617
07/17/68 --	70	1101	63 8.3	990	104 5.19 49	21 1.73 16	83 3.61 34	5 0.13 1	0 0.00 0	167 2.74 25	254 5.29 49	90 2.54 23	13.8 0.22 2	--	--	0	737 653
02S/12W-25M01S 10/17/67 --	70	1101	64 --	921	110 5.49 55	23 1.89 19	56 2.43 25	4 0.10 1	0 0.00 0	170 2.79 28	231 4.81 48	82 2.31 23	6.6 0.11 1	--	--	0	682 597
07/17/68 --	70	1101	-- 7.9	746	114 5.69 56	23 1.89 19	56 2.43 24	5 0.13 1	0 0.00 0	166 2.72 26	244 5.08 49	84 2.37 23	5.4 0.09 1	--	--	0	697 613
02S/12W-27C01S 10/17/67 --	70	1101	66 --	980	104 5.19 48	21 1.73 16	88 3.83 35	4 0.10 1	0 0.00 0	178 2.92 28	236 4.91 47	88 2.48 23	13.8 0.22 2	--	--	0	732 643
07/17/68 --	70	1101	64 8.4	908	95 4.74 48	18 1.48 15	79 3.44 35	5 0.13 1	0 0.00 0	176 2.88 30	219 4.56 47	77 2.17 22	8.8 0.14 1	--	--	0	677 589
02S/12W-28Q01S 10/17/67 --	70	1101	66 --	960	107 5.34 51	22 1.81 17	72 3.13 30	4 0.10 1	0 0.00 0	196 3.21 31	227 4.73 45	83 2.34 22	13.5 0.22 2	--	--	0	724 625

TABLE E-1
MINERAL ANALYSES OF GROUND WATER

SOUTHERN CALIFORNIA

WELL NO. DATE	COUNTY	LAB SAMPLER	TEMP PH	EC	MINERAL CONSTITUENTS IN				MILLIGRAMS PER LITER MILLIEQUIVALENTS PER LITER PERCENT REACTANCE VALUES				MILLIGRAMS PER LITER				TDS 180C (*105C) SUM	TH NCH
					CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	8	SI02		
LA-SAN GABRIEL RIVER HYDRO UNIT U0500																		
DISTAL PL OF LA CO HYDRO SUBUNIT U05A0																		
CENTRAL HYDRO SUBAREA U05A5																		
12W-28Q01S	70	1101	66	963	109	22	75	6	0	196	237	82	12.9	--	--	0	739	362
17/68	--	1101	8.4		5.44	1.81	3.26	0.15	0.00	3.21	4.93	2.31	0.21	--	--	0	641	201
					51	17	31	1	0	30	46	22	2					
12W-29A04S	70	1101	68	838	102	23	45	2	0	226	169	60	11.5	--	--	0	638	349
17/67	--	1101	--		5.09	1.89	1.96	0.05	0.00	3.70	3.52	1.69	0.18	--	--	0	524	164
					57	21	22	1	0	41	39	19	2					
12W-30M02S	70	1101	64	877	110	22	45	4	0	221	191	82	7.9	--	--	0	682	365
17/68	--	1101	8.2		5.49	1.81	1.96	0.10	0.00	3.62	3.98	2.31	0.13	--	--	0	571#	184
					59	19	21	1	0	36	40	23	1					
12W-30M02S	70	5050	71	829	96	19	47	3	4	182	169	59	5.3	0.0	0.10	--	511	318
15/68	1500	--	8.4		4.79	1.56	2.04	0.08	0.13	2.98	3.52	1.66	0.08				492	162
					56	18	24	1	2	36	42	20	1					
12W-31M02S	70	1101	69	696	79	20	46	3	0	246	115	46	10.6	--	--	0	565	279
15/68	--	1101	7.9		3.94	1.64	2	0.08	0.00	4.03	2.39	1.30	0.17	--	--	0	441	77
					51	21	26	1	0	51	30	16	2					
12W-34R01S	70	1101	70	690	78	19	47	2	0	238	104	47	8.5	0.4	--	0	543	272
17/68	--	1101	7.8		3.89	1.56	2.04	0.05	0.00	3.90	2.16	1.32	0.14				423	77
					51	21	27	1	0	52	29	18	2					
12W-34R01S	70	1101	70	743	86	20	38	4	0	175	168	94	8.5	--	--	0	593	297
17/67	--	1101	--		4.29	1.64	1.65	0.10	0.00	2.87	3.50	2.65	0.14	--	--	0	505#	153
					56	21	21	1	0	31	38	29	1					
12W-34R01S	70	1101	66	571	72	13	29	4	0	219	93	28	3.0	--	--	0	461	233
18/68	--	1101	8.2		3.59	1.07	1.26	0.10	0.00	3.59	1.94	0.79	0.05	--	--	0	350#	53
					60	18	21	2	0	56	30	12	1					
12W-34R01S	70	1101	--	813	110	22	32	5	0	209	198	46	8.0	--	--	0	630	365
17/68	--	1101	8.0		5.49	1.81	1.39	0.13	0.00	3.42	4.12	1.30	0.13	--	--	0	524	194
					62	20	16	1	0	38	46	14	1					
13W-05B01S	70	5050	72	1089	115	32	70	9	0	318	163	98	1.0	0.5	0.19	--	701	419
30/68	--	--	7.9		5.74	2.63	3.04	0.23	0.00	5.21	3.39	2.76	0.02				645	158
					49	23	26	2	0	46	30	24	0					
13W-10P05S	70	1101	--	691	72	18	47	5	0	217	113	43	13.8	--	--	0	528	253
15/68	830	1101	8.3		3.59	1.48	2.04	0.13	0.00	3.56	2.35	1.21	0.22	--	--	0	419	75
					50	20	28	2	0	48	32	16	3					
13W-11E04S	70	1101	--	787	85	21	54	5	0	271	118	62	0.0	--	--	0	616	298
15/68	815	1101	8.2		4.24	1.73	2.35	0.13	0.00	4.44	2.46	1.75	0.00	--	--	0	479	76
					50	20	28	1	0	51	28	20	0					
13W-11R03S	70	1101	--	622	66	16	47	5	0	251	95	34	0.0	--	--	0	514	230
15/68	900	1101	8.2		3.29	1.31	2.04	0.13	0.00	4.11	1.98	0.96	0.00	--	--	0	387	24
					49	19	30	2	0	58	28	14	0					
13W-12A01S	70	1101	--	834	84	24	64	4	0	279	77	81	46.8	--	--	0	659	308
15/68	1100	1101	8.4		4.19	1.97	2.78	0.10	0.00	4.57	1.60	2.28	0.75	--	--	0	518	79
					46	22	31	1	0	50	17	25	8					
13W-13R01S	70	1101	74	588	57	13	46	3	0	227	67	36	0.0	0.5	--	0	449	195
18/68	--	1101	7.7		2.84	1.07	2	0.08	0.00	3.72	1.39	1.01	0.00				335	9
					47	18	33	1	0	61	23	17	0					
13W-14M02S	70	1101	--	549	53	10	55	5	0	232	75	27	5.5	--	--	0	462	173
15/68	915	1101	8.3		2.64	0.82	2.39	0.13	0.00	3.80	1.56	0.76	0.09	--	--	0	345	0
					44	14	40	2	0	61	25	12	1					
13W-21E01S	70	1101	--	791	91	21	55	5	0	285	127	49	20.3	--	--	0	653	313
15/68	1120	1101	7.9		4.54	1.73	2.39	0.13	0.00	4.67	2.64	1.38	0.33	--	--	0	509	79
					52	20	27	1	0	52	29	15	4					
13W-28G02S	70	1101	--	728	80	19	50	5	0	224	122	51	0.0	--	--	0	551	277
15/68	1310	1101	8.0		3.99	1.56	2.17	0.13	0.00	3.67	2.54	1.44	0.00	--	--	0	438	93
					51	20	28	2	0	48	33	19	0					
13W-32R11S	70	5050	70	561	62	13	41	4	--	223	74	26	0.0	0.5	0.09	--	336	208
20/68	--	--	7.8		3.09	1.07	1.78	0.10	--	3.65	1.54	0.73	0.00				331	25
					51	18	29	2		62	26	12	0					
14W-05D08S	70	1101	--	1360	103	52	133	4	0	470	220	112	0.0	--	--	0	1094	471
04/67	--	1101	8.4		5.14	4.28	5.78	0.10	0.00	7.70	4.58	3.16	0.00	--	--	0	856	85
					34	28	38	1	0	50	30	20	0					
14W-05D08S	70	1101	--	1350	104	51	128	6	0	453	223	108	5.5	--	--	0	1078	469
04/68	1230	1101	7.6		5.19	4.19	5.57	0.15	0.00	7.42	4.64	3.04	0.09	--	--	0	849	97
					34	28	37	1	0	49	30	20	1					
14W-05D08S	70	1101	--	1460	117	57	133	6	0	439	314	110	3.2	--	--	0	1179	526
04/68	--	1101	7.8		5.84	4.69	5.78	0.15	0.00	7.19	6.54	3.10	0.05	--	--	0	957	166
					35	28	35	1	0	43	39	18	0					
14W-05D08S	70	1101	--	1440	119	58	120	4	0	417	295	107	0.0	0.3	--	0	1121	535
05/68	--	1101	7.6		5.94	4.77	5.22	0.10	0.00	6.83	6.14	3.02	0.00				909	193
					37	30	33	1	0	43	38	19	0					

TABLE E-1

MINERAL ANALYSES OF GROUND WATER

SOUTHERN CALIFORNIA

STATE WELL NO. DATE	COUNTY TIME	LAB SAMPLER	TEMP PH	EC	MINERAL CONSTITUENTS IN				MILLIGRAMS PER LITER MILLIEQUIVALENTS PER LITER PERCENT REACTANCE VALUES				MILLIGRAMS PER LITER				TDS 180C (*105C) SUM
					CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SiO2	
LA-SAN GABRIEL RIVER HYDRO UNIT U0500																	
COASTAL PL OF LA CO HYDRO SUBUNIT U05A0																	
CENTRAL HYDRO SUBAREA U05A5																	
02S/14W-14C02S 04/04/68 830	70	5050	65 8.2	628	67 3.34 49	16 1.31 19	46 2 30	4 0.10 1	--	227 3.72 56	97 2.02 30	33 0.93 14	0.5 0.01 0	0.3	0.17	--	386 376
02S/14W-23H03S 04/04/68 900	70	5050	64 8.1	741	81 4.04 50	21 1.73 21	51 2.22 27	4 0.10 1	--	253 4.15 53	103 2.14 27	47 1.32 17	12.0 0.19 2	0.3	0.20	--	455 444
02S/14W-23H12S 04/04/68 850	70	5050	65 8.1	663	65 3.24 46	22 1.81 26	44 1.91 27	3 0.08 1	--	234 3.83 55	89 1.85 27	38 1.07 15	11.0 0.18 3	0.4	0.19	--	401 388
03S/11W-16H02S 10/10/67 --	70	5868	75 7.7	1242	48 2.39 20	33 2.71 23	156 6.78 56	5 0.13 1	--	350 5.74 48	201 4.18 35	75 2.11 18	0.0 0.00 0	0.3	0.30	23	714 714
03S/11W-17M03S 10/10/67 --	70	5868	75 7.3	1485	157 7.83 57	32 2.63 19	71 3.09 23	5 0.13 1	--	290 4.75 35	63 1.31 10	271 7.64 56	0.0 0.00 0	0.1	0.21	16	758 758
03S/11W-18G04S 04/18/68 --	70	1101	-- 7.9	1210	144 7.18 55	30 2.47 19	77 3.35 25	5 0.13 1	0	323 5.29 41	114 2.37 19	173 4.88 38	13.0 0.21 2	--	--	0	879 715
07/15/68 1000	70	1101	-- 8.0	1270	139 6.94 51	31 2.55 19	88 3.83 28	6 0.15 1	0	362 5.93 43	118 2.46 18	182 5.13 37	13.5 0.22 2	--	--	0	939 756
03S/11W-18M01S 10/10/67 --	70	5868	75 7.3	1047	120 5.99 58	22 1.81 18	54 2.35 23	5 0.13 1	--	310 5.08 50	108 2.25 22	101 2.85 28	4.0 0.06 1	0.2	0.17	20	586 587
03S/11W-19A02S 10/10/67 --	70	5868	75 7.5	835	97 4.84 61	18 1.48 19	35 1.52 19	4 0.10 1	--	256 4.19 53	49 1.02 13	95 2.68 34	2.0 0.03 0	0.3	0.06	20	446 447
03S/11W-19A03S 10/10/67 --	70	5868	73 7.5	775	87 4.34 59	17 1.40 19	35 1.52 21	4 0.10 1	--	248 4.06 56	45 0.94 13	79 2.23 31	2.0 0.03 0	0.3	0.06	18	409 410
03S/11W-19E02S 10/10/67 --	70	5868	75 7.7	438	52 2.59 61	9 0.74 17	20 0.87 20	3 0.08 2	--	214 3.51 81	26 0.54 12	9 0.25 6	1.0 0.02 0	0.4	0.06	19	244 245
03S/11W-19O01S 10/10/67 --	70	5868	75 7.8	466	55 2.74 60	9 0.74 16	23 1 22	3 0.08 2	--	221 3.62 80	28 0.58 13	12 0.34 7	0.0 0.00 0	0.5	0.06	20	260 260
03S/11W-20C01S 10/10/67 --	70	5868	75 7.4	1164	81 4.04 36	30 2.47 22	104 4.52 40	5 0.13 1	--	138 2.26 20	292 6.08 54	103 2.90 26	0.0 0.00 0	0.4	0.08	8	692 692
03S/11W-22L01S 07/18/68 900	70	1101	74 8.2	858	58 2.89 28	21 1.73 17	125 5.44 53	4 0.10 1	0	272 4.46 43	175 3.64 35	80 2.26 22	0.0 0.00 0	--	--	0	735 597
03S/11W-31M03S 07/15/68 1030	70	1101	-- 8.0	370	49 2.44 59	7 0.57 14	24 1.04 25	4 0.10 2	0	224 3.67 85	21 0.44 10	7 0.20 5	0.0 0.00 0	--	--	0	336 223
03S/12W-03M01S 10/17/67 --	70	1101	70 8.4	679	94 4.69 66	13 1.07 15	29 1.26 18	3 0.08 1	0	170 2.79 40	130 2.71 39	44 1.24 18	9.5 0.15 2	--	--	0	492 407
07/17/68 --	70	1101	78 8.0	1070	90 4.49 39	27 2.22 19	107 4.65 40	6 0.15 1	0	152 2.49 21	297 6.18 53	97 2.73 24	10.4 0.17 1	--	--	0	786 710
03S/12W-05A01S 10/31/67 --	70	5868	75 7.5	919	126 6.29 66	18 1.48 16	37 1.61 17	4 0.10 1	--	246 4.03 43	172 3.58 38	60 1.69 18	6.0 0.10 1	0.3	0.04	20	565 565
03S/12W-05M01S 10/17/67 --	70	1101	67 8.5	776	96 4.79 59	22 1.81 22	33 1.43 18	3 0.08 1	0	230 3.77 46	142 2.96 36	43 1.21 15	14.0 0.22 3	--	--	0	583 467
07/17/68 --	70	1101	-- 7.6	789	109 5.44 62	21 1.73 19	36 1.56 18	4 0.10 1	0	259 4.24 47	163 3.39 38	46 1.30 14	5.3 0.08 1	--	--	0	643 512
03S/12W-11K06S 10/10/67 --	70	5868	73 7.5	693	82 4.09 61	17 1.40 21	26 1.13 17	4 0.10 1	--	236 3.87 58	95 1.98 30	28 0.79 12	3.0 0.05 1	0.5	0.08	18	390 390
03S/12W-13A02S 07/15/68 945	70	1101	-- 8.0	878	106 5.29 54	22 1.81 19	58 2.52 26	5 0.13 1	0	273 4.47 45	168 3.50 35	56 1.58 16	20.0 0.32 3	--	--	0	708 570
03S/12W-13F01S 10/10/67 --	70	5868	75 7.5	785	97 4.84 61	20 1.64 21	32 1.39 17	4 0.10 1	--	281 4.60 58	115 2.39 30	30 0.85 11	6.0 0.10 1	0.3	0.08	19	461 462

TABLE E-1
MINERAL ANALYSES OF GROUND WATER

SOUTHERN CALIFORNIA

STATE WELL NO. DATE	COUNTY TIME	LAB SAMPLER	TEMP PH	EC	MINERAL CONSTITUENTS IN				MILLIGRAMS PER LITER MILLIEQUIVALENTS PER LITER PERCENT REACTANCE VALUES				MILLIGRAMS PER LITER				TDS 180C (*105C) SUM	TH NCH		
					CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SI02				
					LA-SAN GABRIEL RIVER HYDRO UNIT U0500															
COASTAL PL OF LA CO HYDRO SUBUNITU05A0 CENTRAL HYDRO SUBAREA U05A5																				
03S/12W-14C06S 10/10/67	70	5868	75 7.5	838	105 5.24 63	21 1.73 21	30 1.30 16	4 0.10 1	-- 218 3.57 43	156 3.25 39	48 1.35 16	6.0 0.10 1	0.3	0.04	18	495 496	349 170			
03S/12W-14F01S 10/31/67	70	5868	75 7.5	831	111 5.54 66	18 1.48 18	30 1.30 15	4 0.10 1	-- 224 3.67 44	159 3.31 39	48 1.35 16	4.0 0.06 1	0.3	0.04	19	505 504	351 167			
03S/12W-14J01S 10/10/67	70	5868	75 7.5	738	93 4.64 62	18 1.48 20	29 1.26 17	4 0.10 1	-- 240 3.93 53	118 2.46 33	34 0.96 13	8.0 0.13 2	0.3	0.04	20	442 443	306 109			
03S/12W-15A03S 10/31/67	70	5868	75 7.6	742	98 4.89 61	19 1.56 20	32 1.39 17	4 0.10 1	-- 300 4.92 62	101 2.10 26	33 0.93 12	0.0 0.00 0	0.2	0.04	19	454 454	323 77			
03S/12W-15N02S 10/31/67	70	5868	75 7.5	971	124 6.19 62	20 1.64 16	46 2 20	4 0.10 1	-- 369 6.05 61	96 2.00 20	64 1.80 18	0.0 0.00 0	0.2	0.12	20	559 556	392 89			
03S/12W-16H01S 10/31/67	70	5868	75 7.6	641	85 4.24 66	13 1.07 17	24 1.04 16	3 0.08 1	-- 257 4.21 66	79 1.64 26	18 0.51 8	2.0 0.03 0	0.4	0.04	19	370 370	266 55			
03S/12W-18L01S 09/17/68	70	5868	80 7.7	595	81 4.04 54	17 1.40 19	44 1.91 26	3 0.08 1	-- 302 4.95 67	59 1.23 17	42 1.18 16	1.0 0.02 0	0.4	0.17	23	413 420	272 24			
03S/12W-19C01S 09/24/68	70	5868	77 7.7	714	97 4.84 59	18 1.48 18	42 1.83 22	3 0.08 1	-- 312 5.11 62	81 1.69 20	53 1.49 18	0.0 0.00 0	0.4	0.11	26	475 474	316 60			
03S/12W-21H01S 10/31/67	70	5868	75 7.5	626	84 4.19 65	13 1.07 17	25 1.09 17	3 0.08 1	-- 281 4.60 73	38 0.79 12	33 0.93 15	0.0 0.00 0	0.4	0.06	19	358 354	263 33			
03S/12W-22A01S 10/31/67	70	5868	75 7.8	502	67 3.34 65	10 0.82 16	20 0.87 17	3 0.08 1	-- 239 3.92 78	36 0.75 15	12 0.34 7	1.0 0.02 0	0.4	0.08	19	286 286	208 12			
03S/12W-22E01S 10/31/67	70	5868	75 7.6	1018	133 6.64 64	25 2.05 20	36 1.56 15	4 0.10 1	-- 369 6.05 59	100 2.08 20	77 2.17 21	0.0 0.00 0	0.3	0.06	19	581 576	435 132			
03S/12W-23E03S 10/31/67	70	5868	75 7.5	976	127 6.34 64	21 1.73 18	38 1.65 17	4 0.10 1	-- 360 5.90 60	113 2.35 24	58 1.63 16	0.0 0.00 0	0.3	0.06	20	558 559	403 108			
03S/12W-23R01S 10/10/67	70	5868	75 7.3	841	98 4.89 58	23 1.89 22	36 1.56 18	4 0.10 1	-- 327 5.36 63	97 2.02 24	38 1.07 13	0.0 0.00 0	0.3	0.08	18	475 476	339 71			
03S/12W-24R01S 10/10/67	70	5868	73 7.7	994	120 5.99 60	25 2.05 21	41 1.78 18	4 0.10 1	-- 323 5.29 53	138 2.87 29	60 1.69 17	2.0 0.03 0	0.3	0.13	18	569 568	402 138			
03S/12W-24O01S 10/10/67	70	5868	73 7.5	653	82 4.09 63	15 1.23 19	24 1.04 16	4 0.10 2	-- 267 4.38 68	69 1.44 22	20 0.56 9	4.0 0.06 1	0.4	0.08	18	367 368	266 47			
03S/12W-24F01S 10/10/67	70	5868	73 7.4	1125	138 6.89 62	27 2.22 20	45 1.96 17	4 0.10 1	-- 359 5.88 52	159 3.31 29	72 2.03 18	1.0 0.02 0	0.3	0.17	18	641 641	456 161			
03S/12W-24K01S 10/10/67	70	5868	75 7.3	1005	120 5.99 57	25 2.05 20	52 2.26 22	5 0.13 1	-- 348 5.70 55	147 3.06 30	54 1.52 15	0.0 0.00 0	0.3	0.13	18	592 593	402 117			
03S/12W-33A06S 07/17/68	70	1101	-- 7.5	450	61 3.04 63	9 0.74 15	22 0.96 20	4 0.10 2	0 0.00 0	242 3.97 78	38 0.79 15	12 0.34 7	0.0 0.00 0	--	--	0	388 265*	189 0		
03S/12W-34F01S 07/17/68	70	1101	-- 7.6	417	47 2.34 52	8 0.66 15	32 1.39 31	4 0.10 2	0 0.00 0	227 3.72 79	30 0.62 13	12 0.34 7	0.0 0.00 0	--	--	0	360 245	150 0		
03S/13W-09A01S 09/17/68	70	5868	80 7.7	852	101 5.04 55	19 1.56 17	56 2.43 27	4 0.10 1	-- 253 4.15 46	117 2.43 27	87 2.45 27	1.0 0.02 0	0.3	0.25	20	530 530	330 123			
03S/13W-09K01S 07/17/68	70	1101	-- 8.0	533	59 2.94 50	11 0.90 15	45 1.96 33	4 0.10 2	0 0.00 0	238 3.90 63	80 1.66 27	21 0.59 10	0.0 0.00 0	--	--	0	458 337	192 0		
09/17/68	70	5868	80 8.1	577	58 2.89 50	12 0.99 17	41 1.78 31	3 0.08 1	-- 228 3.74 65	64 1.33 23	23 0.65 11	1.0 0.02 0	0.3	0.17	20	336 335	194 7			
03S/13W-11E01S 07/15/68	70	1101	-- 8.2	533	57 2.84 49	11 0.90 16	45 1.96 34	4 0.10 2	0 0.00 0	237 3.88 65	62 1.29 21	27 0.76 13	4.2 0.07 1	--	--	0	447 327	187 0		

TABLE E-1
MINERAL ANALYSES OF GROUND WATER
SOUTHERN CALIFORNIA

STATE WELL NO. DATE	COUNTY	LAB SAMPLER	TEMP PH	EC	MILLIGRAMS PER LITER MINERAL CONSTITUENTS IN										MILLIGRAMS PER LITER				TDS 180C (*105C) SUM
					MILLIEQUIVALENTS PER LITER				PERCENT REACTANCE VALUES						NO3	F	B	SI02	
					CA	MG	NA	K	CO3	HCO3	SO4	CL							
LA-SAN GABRIEL RIVER HYDRO UNIT U0500																			
COASTAL PL OF LA CO HYDRO SUBUNIT U05A0 CENTRAL HYDRO SUBAREA U05A5																			
03S/13W-11K01S 09/17/68 --	70	1101	67 8.1	549	60 2.99 50	13 1.07 18	43 1.87 31	2 0.05 1	0 0.00 0	227 3.72 62	69 1.44 24	27 0.76 13	2.8 0.04 1	0.4	--	0	445 329		
03S/13W-12J01S 07/15/68 --	70	1101	-- 8.2	551	66 3.29 55	13 1.07 18	35 1.52 25	3 0.08 1	0 0.00 0	250 4.10 66	65 1.35 22	23 0.65 10	4.5 0.07 1	--	--	0	459 333		
03S/13W-12001S 07/15/68 --	70	1101	-- 8.4	521	62 3.09 55	12 0.99 18	33 1.43 25	4 0.10 2	0 0.00 0	251 4.11 70	57 1.19 20	17 0.48 8	3.7 0.06 1	--	--	0	439 313		
09/17/68 --	70	1101	70 8.1	538	66 3.29 58	13 1.07 19	30 1.30 23	2 0.05 1	0 0.00 0	242 3.97 67	65 1.35 23	20 0.56 9	2.5 0.04 1	0.5	--	0	441 318		
03S/13W-13D01 07/15/68 --	70	1101	-- 8.0	505	57 2.84 51	11 0.90 16	40 1.74 31	4 0.10 2	0 0.00 0	244 4.00 69	55 1.14 20	21 0.59 10	2.6 0.04 1	--	--	0	434 311		
03S/13W-13F04S 09/17/68 --	70	5868	80 7.7	489	56 2.79 52	12 0.99 18	35 1.52 28	3 0.08 1	-- 3.97 75	242 0.81 15	39 0.48 9	17 0.48 0	1.0 0.02 0	0.3	0.13	20	302 303		
03S/13W-13G01S 09/17/68 --	70	5868	80 7.6	631	71 3.54 52	16 1.31 19	42 1.83 27	3 0.08 1	-- 4.16 62	254 1.27 19	61 1.24 18	44 0.05 1	3.0 0.05 1	0.3	0.13	25	390 391		
03S/13W-13J01S 09/17/68 --	70	5868	80 7.8	591	70 3.49 53	13 1.07 16	44 1.91 29	3 0.08 1	-- 4.52 69	276 1.10 17	53 0.87 13	31 0.87 0	1.0 0.02 0	0.3	0.06	26	376 378		
03S/13W-13P01S 09/17/68 --	70	5868	80 7.8	502	55 2.74 52	11 0.90 17	36 1.56 30	2 0.05 1	-- 3.90 74	238 0.83 16	40 0.51 10	18 0.51 10	2.0 0.03 1	0.4	0.13	21	302 303		
03S/13W-13R02S 09/17/68 --	70	5868	80 7.8	476	55 2.74 52	12 0.99 19	35 1.52 29	2 0.05 1	-- 4.15 79	253 0.60 11	29 0.45 9	16 0.45 1	3.0 0.05 1	0.3	0.15	23	300 300		
03S/13W-16A01S 09/17/68 --	70	5868	80 7.7	552	59 2.94 49	14 1.15 19	43 1.87 31	3 0.08 1	-- 3.85 64	235 1.31 22	63 0.76 13	27 0.76 13	3.0 0.05 1	0.4	0.17	23	352 352		
03S/13W-16K01S 09/17/68 --	70	5868	80 7.9	561	68 3.39 51	15 1.23 18	45 1.96 29	3 0.08 1	-- 3.92 59	239 1.75 26	84 0.99 15	35 0.99 15	1.0 0.02 0	0.3	0.17	23	393 392		
03S/13W-21A01S 09/24/68 --	70	5868	77 7.7	500	59 2.94 50	12 0.99 17	42 1.83 31	3 0.08 1	-- 3.83 66	234 1.33 23	64 0.65 11	23 0.65 11	1.0 0.02 0	0.5	0.19	24	344 344		
03S/13W-21B01S 09/24/68 --	70	5868	77 7.7	527	58 2.89 50	13 1.07 18	41 1.78 31	3 0.08 1	-- 3.79 65	231 1.37 24	66 0.65 11	23 0.65 11	1.0 0.02 0	0.4	0.13	24	340 344		
03S/13W-21C06S 09/24/68 --	70	5868	77 7.8	500	58 2.89 49	12 0.99 17	46 2 34	3 0.08 1	-- 3.80 63	232 1.50 25	72 0.70 12	25 0.70 12	1.0 0.02 0	0.5	0.06	23	355 355		
03S/13W-21R03S 09/24/68 --	70	5868	77 8.0	417	52 2.59 46	13 1.07 19	43 1.87 33	3 0.08 1	-- 3.52 64	215 1.29 23	62 0.68 12	24 0.68 12	0.0 0.00 0	0.5	0.04	24	328 328		
03S/13W-22K01S 09/24/68 --	70	5868	77 8.0	500	49 2.44 42	15 1.23 21	47 2.04 35	4 0.10 2	-- 3.97 69	242 0.87 15	42 0.93 16	33 0.93 16	0.0 0.00 0	0.5	0.11	33	343 343		
03S/13W-25004S 09/24/68 --	70	5868	77 7.4	800	103 5.14 54	22 1.81 19	56 2.43 26	4 0.10 1	-- 4.51 47	275 2.91 31	140 2.06 22	73 2.06 22	0.0 0.00 0	0.4	0.13	38	571 572		
03S/13W-25G02S 07/17/68 --	70	1101	79 8.0	480	41 2.04 40	7 0.57 11	56 2.43 47	3 0.08 1	0 0.00 0	193 3.16 59	66 1.37 26	28 0.79 15	0.0 0.00 0	--	--	0	394 296		
09/17/68 --	70	1101	78 7.8	655	39 1.95 43	4 0.33 7	50 2.17 48	2 0.05 1	0 0.00 0	171 2.80 60	58 1.21 26	22 0.62 13	2.0 0.03 1	0.5	--	0	349 262		
09/24/68 --	70	5868	77 7.9	394	38 1.90 41	3 0.25 5	56 2.43 52	3 0.08 2	-- 2.88 62	176 1.06 23	51 0.70 15	25 0.70 15	0.0 0.00 0	0.5	0.46	33	297 297		
03S/13W-26C01S 07/17/68 --	70	1101	-- 7.9	463	38 1.90 38	4 0.33 7	62 2.70 54	3 0.08 1	0 0.00 0	175 2.87 56	68 1.41 28	27 0.76 15	2.0 0.03 1	--	--	0	379 290		
03S/13W-34G02S 07/15/68 --	70	1101	77 8.1	529	51 2.54 47	7 0.57 11	51 2.22 41	3 0.08 1	0 0.00 0	204 3.34 56	65 1.35 23	44 1.24 21	0.0 0.00 0	--	--	0	425 322#		

TABLE E-1
MINERAL ANALYSES OF GROUND WATER

SOUTHERN CALIFORNIA

STATE WELL NO. DATE	COUNTY	LAB TIME	TEMP SAMPLER PH	EC	MINERAL CONSTITUENTS IN				MILLIGRAMS PER LITER MILLIEQUIVALENTS PER LITER PERCENT REACTANCE VALUES				MILLIGRAMS PER LITER				TDS 180C (*105C) SUM	TH MCM
					CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	8	SiO2		
COASTAL PL OF LA CO HYDRO SUBUNIT U05A0 CENTRAL HYDRO SUBAREA U05A5																		
03S/13W-34H02S 04/02/68	70	5050	-- 7.9	1119	34 1.70 14	46 3.78 32	140 6.09 52	4 0.10 1	-- 2.47 22	151 6.18 54	297 2.79 24	99 0.00 0	0.0 0.00 0	0.5	0.15	--	707 695	274 150
03S/13W-35001S 07/15/68	70	1101	80 8.2	394	19 0.95 23	2 0.16 4	69 3.00 72	2 0.05 1	0 0.00 0	170 2.79 67	20 0.42 10	34 0.96 23	0.0 0.00 0	--	--	0	316 230	55 0
04S/11W-07N01S 01/26/68	70	5868	73 7.9	432	51 2.54 55	7 0.57 12	34 1.48 32	2 0.05 1	-- 3.80 81	232 0.58 12	28 0.28 6	10 0.02 0	1.0 0.00 0	0.4	0.13	20	268 268	156 0
04S/11W-07P02S 01/26/68	70	5868	73 7.7	401	51 2.54 57	8 0.66 15	27 1.17 26	2 0.05 1	-- 3.83 87	234 0.39 9	19 0.17 4	6 0.00 0	0.0 0.00 0	0.3	0.11	20	251 249	160 0
04S/11W-18P01S 04/19/68	70	4206	74 8.2	455	46 2.29 48	8 0.66 14	41 1.78 37	2 0.05 1	0 0.00 0	218 3.57 77	30 0.62 13	15 0.42 9	-- 0.00 0	--	--	24	261 274	148 0
04S/12W-05H02S 07/17/68	70	1101	-- 6.3	720	130 6.49 97	2 0.16 2	1 0.04 1	0 0.00 0	0 0.00 0	101 1.65 25	40 0.83 12	149 4.20 63	0.0 0.00 0	--	--	0	423 372	332 249
04S/12W-06D03S 01/12/68	70	4206	78 7.7	427	28 1.40 39	6 0.49 14	38 1.65 46	3 0.08 2	0 0.00 0	175 2.87 68	37 0.77 18	20 0.56 13	-- 0.00 0	--	--	22	241 240#	95 0
09/23/68	70	4206	79 8.1	424	37 1.85 43	4 0.33 8	46 2 47	3 0.08 2	0 0.00 0	174 2.85 67	36 0.75 18	22 0.62 15	-- 0.00 0	--	--	17	252 251	109 0
04S/12W-06J01S 02/06/68	70	4206	84 8.6	390	13 0.65 15	0 0.00 0	82 3.57 84	1 0.02 1	8 0.27 7	166 2.72 69	0 0.00 0	33 0.93 24	-- 0.00 0	--	--	18	238 237#	32 0
03/05/68	70	4206	82 8.3	388	12 0.60 15	0 0.00 0	79 3.44 85	1 0.02 1	0 0.00 0	188 3.08 76	0 0.00 0	34 0.96 24	-- 0.00 0	--	--	18	239 237	30 0
07/02/68	70	4206	84 8.6	393	11 0.55 15	0 0.00 0	70 3.04 84	1 0.02 1	6 0.20 5	165 2.70 68	5 0.10 3	35 0.99 25	-- 0.00 0	--	--	20	230 230#	27 0
08/06/68	70	4206	87 8.7	386	11 0.55 12	0 0.00 0	90 3.91 87	2 0.05 1	11 0.37 9	154 2.52 62	9 0.19 5	35 0.99 24	-- 0.00 0	--	--	19	254 253#	27 0
09/03/68	70	4206	84 8.6	395	11 0.55 14	0 0.00 0	76 3.30 85	1 0.02 1	5 0.17 4	163 2.67 62	21 0.44 10	37 1.04 24	-- 0.00 0	--	--	16	250 248#	27 0
04S/12W-06J02S 02/06/68	70	4206	85 8.6	387	12 0.60 15	0 0.00 0	79 3.44 85	1 0.02 1	7 0.23 6	166 2.72 71	0 0.00 0	31 0.87 23	-- 0.00 0	--	--	17	230 229#	30 0
03/05/68	70	4206	82 8.5	388	14 0.70 17	0 0.00 0	75 3.26 82	1 0.02 1	6 0.20 5	178 2.92 74	0 0.00 0	29 0.82 21	-- 0.00 0	--	--	18	232 231	35 0
04/10/68	70	4206	75 8.6	392	11 0.55 14	0 0.00 0	75 3.26 85	1 0.02 1	19 0.63 15	158 2.59 63	0 0.00 0	31 0.87 21	-- 0.00 0	--	--	19	235 234#	27 0
07/02/68	70	4206	84 8.6	388	12 0.60 18	0 0.00 0	63 2.74 81	1 0.02 1	7 0.23 6	168 2.75 69	6 0.12 3	31 0.87 22	-- 0.00 0	--	--	20	224 223#	30 0
08/06/68	70	4206	87 8.7	377	12 0.60 13	0 0.00 0	90 3.91 86	2 0.05 1	7 0.23 6	169 2.77 67	11 0.23 6	31 0.87 21	-- 0.00 0	--	--	18	256 255#	30 0
09/03/68	70	4206	82 8.6	383	12 0.60 15	1 0.08 2	76 3.30 82	1 0.02 1	5 0.17 4	167 2.74 71	2 0.04 1	32 0.90 23	-- 0.00 0	--	--	16	229 228	34 0
04S/12W-06K02S 01/12/68	70	4206	79 8.4	362	16 0.80 24	2 0.16 5	53 2.30 69	2 0.05 1	5 0.17 5	152 2.49 72	12 0.25 7	20 0.56 16	-- 0.00 0	--	--	18	205 203	48 0
04S/12W-08D02S 07/17/68	70	1101	-- 7.7	345	24 1.20 33	2 0.16 4	52 2.26 61	2 0.05 1	0 0.00 0	170 2.79 77	15 0.31 9	17 0.48 13	1.8 0.03 1	--	--	0	283 198	68 0
04S/12W-11803S 07/17/68	70	1101	-- 8.0	373	48 2.39 59	5 0.41 10	27 1.17 29	4 0.10 2	0 0.00 0	214 3.51 81	25 0.52 12	10 0.28 6	0.0 0.00 0	--	--	0	333 225#	140 0
04S/12W-13C02S 07/18/68	70	1101	-- 7.9	222	10 0.50 20	2 0.16 7	37 1.61 65	8 0.20 8	0 0.00 0	126 2.06 85	7 0.14 6	8 0.22 9	0.0 0.00 0	--	--	0	198 134	33 0

TABLE E-1

MINERAL ANALYSES OF GROUND WATER

SOUTHERN CALIFORNIA

STATE WELL NO. DATE	COUNTY TIME	LAB SAMPLER	TEMP PH	EC	MINERAL CONSTITUENTS IN				MILLIGRAMS PER LITER MILLIEQUIVALENTS PER LITER PERCENT REACTANCE VALUES				MILLIGRAMS PER LITER				TDS 180C (*105C) SUM	I NC
					CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SI02		
LA-SAN GABRIEL RIVER HYDRO UNIT U0500																		
COASTAL PL OF LA CO HYDRO SUBUNIT U05A0																		
CENTRAL HYDRO SUBAREA U05AS																		
04S/12W-13C03S 09/03/68 --	70	4206	80 8.0	388	46 2.29 54	5 0.41 10	33 1.43 34	3 0.08 2	0 0.00 0	194 3.18 82	21 0.44 11	9 0.25 7	--	--	--	21	234 234#	13
04S/12W-13D01S 07/18/68 --	70	1101 1101	-- 7.6	360	34 1.70 43	3 0.25 6	45 1.96 49	3 0.08 2	0 0.00 0	208 3.41 85	12 0.25 6	13 0.37 9	0.0 0.00 0	--	--	0	318 213	9
04S/12W-13D03S 04/10/68 --	70	4206	76 7.7	381	47 2.34 58	5 0.41 10	27 1.17 29	3 0.08 2	0 0.00 0	210 3.44 89	13 0.27 7	6 0.17 4	--	--	--	22	227 227	13
04S/12W-13N02S 01/12/68 --	70	4206	78 7.9	395	22 1.10 31	3 0.25 7	49 2.13 60	2 0.05 1	0 0.00 0	171 2.80 73	31 0.64 17	14 0.39 10	--	--	--	19	225 225#	6
02/06/68 --	70	4206	82 8.4	388	23 1.15 27	2 0.16 4	65 2.83 67	2 0.05 1	5 0.17 5	159 2.61 71	22 0.46 12	15 0.42 12	--	--	--	18	232 231#	6
03/05/68 --	70	4206	81 8.4	386	25 1.25 30	2 0.16 4	62 2.70 65	2 0.05 1	1 0.03 1	177 2.90 75	24 0.50 13	15 0.42 11	--	--	--	18	237 236#	6
04/10/68 --	70	4206	77 8.5	393	21 1.05 26	2 0.16 4	63 2.74 68	2 0.05 1	4 0.13 3	165 2.70 71	26 0.54 14	15 0.42 11	--	--	--	19	234 234#	6
07/02/68 --	70	4206	81 8.4	388	22 1.10 32	2 0.16 5	48 2.09 62	1 0.02 1	4 0.13 3	160 2.62 67	36 0.75 19	15 0.42 11	--	--	--	20	228 227#	6
08/06/68 --	70	4206	84 8.4	385	23 1.15 27	2 0.16 4	67 2.91 68	2 0.05 1	10 0.33 9	149 2.44 63	33 0.69 18	15 0.42 11	--	--	--	19	247 245#	6
09/03/68 --	70	4206	80 8.3	396	22 1.10 28	2 0.16 4	60 2.61 66	2 0.05 1	0 0.00 0	168 2.75 69	36 0.75 19	17 0.48 12	--	--	--	19	242 241	6
04S/12W-14A02S 02/06/68 --	70	4206	81 7.9	388	47 2.34 60	5 0.41 10	25 1.09 28	3 0.08 2	0 0.00 0	201 3.29 90	6 0.12 3	9 0.25 7	--	--	--	20	215 214#	11
03/05/68 --	70	4206	79 7.8	396	62 3.09 66	6 0.49 10	23 1 21	4 0.10 2	0 0.00 0	203 3.33 88	12 0.25 7	7 0.20 5	--	--	--	20	235 234#	11
04/10/68 --	70	4206	75 7.9	392	48 2.39 59	6 0.49 12	25 1.09 27	3 0.08 2	0 0.00 0	202 3.31 89	9 0.19 5	8 0.22 6	--	--	--	20	220 219#	11
07/02/68 --	70	4206	81 8.0	387	50 2.49 62	6 0.49 12	23 1 25	2 0.05 1	0 0.00 0	195 3.20 82	23 0.48 12	8 0.22 6	0.1 0.00 0	--	--	23	234 231	11
04S/12W-14A03S 07/18/68 --	70	1101 1101	-- 9.2	209	7 0.35 19	1 0.08 4	31 1.35 72	4 0.10 5	8 0.27 14	19 0.31 16	46 0.96 50	13 0.37 19	0.0 0.00 0	--	--	0	129 120	7
04S/12W-14C05S 01/12/68 --	70	4206	76 7.9	345	36 1.80 58	3 0.25 8	22 0.96 31	3 0.08 2	0 0.00 0	172 2.82 81	20 0.42 12	8 0.22 6	--	--	--	20	197 197#	11
02/06/68 --	70	4206	83 8.1	336	39 1.95 52	4 0.33 9	33 1.43 38	2 0.05 1	0 0.00 0	170 2.79 89	6 0.12 4	8 0.22 7	--	--	--	19	196 195#	11
03/05/68 --	70	4206	78 8.2	343	40 1.99 54	4 0.33 9	30 1.30 35	3 0.08 2	0 0.00 0	173 2.83 85	14 0.29 9	8 0.22 7	--	--	--	19	204 204#	11
04/10/68 --	70	4206	75 7.9	350	33 1.65 46	4 0.33 9	35 1.52 43	2 0.05 1	0 0.00 0	170 2.79 84	14 0.29 9	8 0.22 7	--	--	--	19	199 199#	11
07/02/68 --	70	4206	82 8.1	340	35 1.75 49	4 0.33 9	33 1.43 40	2 0.05 1	0 0.00 0	166 2.72 80	21 0.44 13	8 0.22 7	--	--	--	21	206 206#	11
09/03/68 --	70	4206	81 7.9	347	35 1.75 45	4 0.33 8	40 1.74 45	3 0.08 2	0 0.00 0	165 2.70 80	21 0.44 13	9 0.25 7	--	--	--	17	211 211#	11
04S/12W-15B01S 07/17/68 --	70	1101 1101	-- 7.3	333	9 0.45 13	1 0.08 2	67 2.91 83	2 0.05 1	0 0.00 0	133 2.18 62	33 0.69 20	22 0.62 18	0.0 0.00 0	--	--	0	267 200	7
04S/12W-16J01S 01/12/68 --	70	4206	79 7.9	304	14 0.70 27	1 0.08 3	41 1.78 69	1 0.02 1	0 0.00 0	135 2.21 71	10 0.21 7	24 0.68 22	--	--	--	18	176 176#	7

TABLE E-1

MINERAL ANALYSES OF GROUND WATER

SOUTHERN CALIFORNIA

STATE WELL NO. DATE	COUNTY TIME	LAB SAMPLER	TEMP PH	EC	MINERAL CONSTITUENTS IN				MILLIGRAMS PER LITER MILLIEQUIVALENTS PER LITER PERCENT REACTANCE VALUES				MILLIGRAMS PER LITER				TDS 180C (*105C) SUM	TH NCH
					CA	MG	NA	K	CO3	HCO3	504	CL	NO3	F	B	SI02		
					LA-SAN GABRIEL RIVER HYDRO UNIT U0500													
COASTAL PL OF LA CO HYDRO SUBUNIT U05A0																		
CENTRAL HYDRO SUBAREA U05A5																		
04S/12W-16J01S 02/06/68	70	4206	82 8.9	298	15 0.75 23	2 0.16 5	53 2.30 71	1 0.02 1	13 0.43 14	109 1.79 60	2 0.04 1	26 0.73 24	--	--	--	15	181 181#	46 0
03/05/68	70	4206	81 8.5	302	15 0.75 24	1 0.08 3	52 2.26 72	2 0.05 2	4 0.13 4	133 2.18 72	0 0.00 0	25 0.70 23	--	--	--	16	181 181	42 0
04/10/68	70	4206	76 8.1	313	12 0.60 20	1 0.08 3	53 2.30 76	1 0.02 1	0 0.00 0	134 2.20 74	4 0.08 3	25 0.70 24	--	--	--	15	178 177	34 0
07/02/68	70	4206	82 8.5	303	13 0.65 25	1 0.08 3	41 1.78 70	1 0.02 1	4 0.13 4	125 2.05 69	4 0.08 3	25 0.70 24	--	--	--	19	171 170#	37 0
08/06/68	70	4206	81 8.9	298	13 0.65 20	1 0.08 2	56 2.43 76	2 0.05 2	10 0.33 11	118 1.93 64	3 0.06 2	24 0.68 22	--	--	--	16	185 183#	37 0
09/03/68	70	4206	81 8.4	303	14 0.70 24	1 0.08 3	47 2.04 72	1 0.02 1	3 0.10 3	128 2.10 71	1 0.02 1	26 0.73 25	--	--	--	16	174 172	39 0
04S/12W-16R01S 01/12/68	70	4206	78 7.9	320	16 0.80 29	1 0.08 3	41 1.78 66	2 0.05 2	0 0.00 0	155 2.54 79	10 0.21 6	16 0.45 14	--	--	--	18	181 181#	44 0
02/06/68	70	4206	82 8.6	317	20 1.00 29	1 0.08 2	54 2.35 68	1 0.02 1	7 0.23 8	141 2.31 76	2 0.04 1	16 0.45 15	--	--	--	16	187 187#	54 0
03/05/68	70	4206	79 8.6	322	18 0.90 27	1 0.08 2	52 2.26 69	2 0.05 1	5 0.17 5	150 2.46 78	3 0.06 2	16 0.45 14	--	--	--	16	188 187	49 0
04/10/68	70	4206	75 8.3	322	13 0.65 21	1 0.08 3	53 2.30 75	1 0.02 1	1 0.03 1	155 2.54 82	5 0.10 3	15 0.42 14	--	--	--	17	185 183	37 0
07/02/68	70	4206	82 8.5	316	17 0.85 28	1 0.08 3	48 2.09 69	1 0.02 1	5 0.17 5	143 2.34 74	12 0.25 8	15 0.42 13	--	--	--	19	190 189	47 0
08/06/68	70	4206	85 8.4	310	17 0.85 26	1 0.08 2	53 2.30 70	2 0.05 2	13 0.43 13	128 2.10 62	19 0.39 12	16 0.45 13	--	--	--	18	203 202	47 0
09/03/68	70	4206	80 8.6	320	16 0.80 23	1 0.08 2	57 2.48 73	2 0.05 1	5 0.17 5	142 2.33 72	12 0.25 8	17 0.48 15	--	--	--	16	197 196#	44 0
04S/12W-17E01S 07/17/68	70	1101 1101	-- 7.7	352	12 0.60 16	1 0.08 2	70 3.04 81	1 0.02 1	0 0.00 0	173 2.83 75	9 0.19 5	26 0.73 19	0.0 0.00 0	--	--	0	292 205	34 0
08/06/68	70	4206	85 8.7	364	10 0.50 12	1 0.08 2	78 3.39 84	2 0.05 1	8 0.27 6	166 2.72 67	17 0.35 9	26 0.73 18	--	--	--	17	242 241	29 0
04S/12W-17P03S 04/10/68	70	4206	75 8.1	327	12 0.60 20	1 0.08 3	54 2.35 77	1 0.02 1	0 0.00 0	152 2.49 77	4 0.08 3	24 0.68 21	--	--	--	17	189 188#	34 0
07/02/68	70	4206	82 8.5	332	13 0.65 24	1 0.08 3	45 1.96 72	1 0.02 1	4 0.13 4	143 2.34 72	5 0.10 3	24 0.68 21	--	--	--	19	184 183#	37 0
04S/12W-17001S 09/03/68	70	4206	80 8.6	336	13 0.65 20	1 0.08 2	57 2.48 77	1 0.02 1	6 0.20 6	143 2.34 71	2 0.04 1	26 0.73 22	--	--	--	16	194 193	37 0
04S/12W-23C01S 03/05/68	70	4206	81 8.6	332	15 0.75 22	1 0.08 2	58 2.52 74	2 0.05 1	11 0.37 9	187 3.06 72	12 0.25 6	20 0.56 13	--	--	--	16	225 227#	42 0
04/10/68	70	4206	77 8.2	344	21 1.05 30	2 0.16 5	52 2.26 65	1 0.02 1	0 0.00 0	164 2.69 83	6 0.12 4	15 0.42 13	--	--	--	18	196 196#	61 0
07/02/68	70	4206	82 8.4	333	22 1.10 29	1 0.08 2	60 2.61 68	1 0.02 1	4 0.13 4	153 2.51 72	22 0.46 13	13 0.37 11	--	--	--	21	220 220#	59 0
08/06/68	70	4206	85 8.4	334	23 1.15 31	2 0.16 4	55 2.39 64	2 0.05 1	6 0.20 6	150 2.46 71	20 0.42 12	13 0.37 11	--	--	--	18	215 213#	66 0
04S/12W-23K03S 01/12/68	70	4206	79 8.3	364	13 0.65 21	0 0.00 0	56 2.43 78	2 0.05 2	5 0.17 5	151 2.47 71	22 0.46 13	13 0.37 11	--	--	--	17	203 203#	32 0

TABLE E-1
MINERAL ANALYSES OF GROUND WATER

SOUTHERN CALIFORNIA

STATE WELL NO. DATE	COUNTY	LAB SAMPLER	TEMP PH	EC	MINERAL CONSTITUENTS IN				MILLIGRAMS PER LITER MILLIEQUIVALENTS PER LITER PERCENT REACTANCE VALUES				MILLIGRAMS PER LITER				TDS 180C (*105C) SUM	T NC
					CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SI02		
LA-SAN GABRIEL RIVER HYDRO UNIT U0500																		
COASTAL PL OF LA CO HYDRO SUBUNIT U05A0 CENTRAL HYDRO SUBAREA U05A5																		
04S/12W-24H085 07/17/68	70	1101	-- 8.0	379	25 1.25 31	3 0.25 6	56 2.43 61	2 0.05 1	0 0.00 0	178 2.92 70	41 0.85 20	14 0.39 9	0.0 0.00 0	--	--	0	319 229	7
08/06/68	70	4206	84 8.2	376	27 1.35 33	3 0.25 6	54 2.35 58	3 0.08 2	0 0.00 0	173 2.83 73	33 0.69 18	13 0.37 9	--	--	--	19	238 238	8
09/03/68	70	4206	81 8.4	391	27 1.35 32	3 0.25 6	60 2.61 61	2 0.05 1	2 0.07 2	165 2.70 70	33 0.69 18	15 0.42 11	--	--	--	17	242 241#	8
04S/12W-26F025 04/05/68	70	4206	78 8.4	368	10 0.50 14	1 0.08 2	70 3.04 83	2 0.05 1	3 0.10 3	144 2.36 68	33 0.69 20	11 0.31 9	--	--	--	14	216 215#	2
04S/12W-26M015 03/29/68	70	4206	81 8.9	318	9 0.45 14	1 0.08 2	62 2.70 82	2 0.05 2	13 0.43 15	131 2.15 73	0 0.00 0	13 0.37 12	--	--	--	16	181 181#	2
04S/12W-28M125 01/12/68	70	4206	82 8.6	365	6 0.30 10	1 0.08 3	57 2.48 86	1 0.02 1	8 0.27 7	182 2.98 75	10 0.21 5	18 0.51 13	--	--	--	18	214 209#	1
02/06/68	70	4206	84 8.9	373	8 0.40 10	0 0.00 0	85 3.70 90	1 0.02 1	13 0.43 11	172 2.82 73	0 0.00 0	22 0.62 16	--	--	--	17	231 231#	2
03/05/68	70	4206	82 8.8	374	8 0.40 11	0 0.00 0	77 3.35 89	1 0.02 1	13 0.43 11	192 3.15 77	2 0.04 1	17 0.48 12	--	--	--	17	232 230#	2
04/10/68	70	4206	75 8.3	372	5 0.25 6	0 0.00 0	85 3.70 93	1 0.02 1	0 0.00 0	197 3.23 84	4 0.08 2	18 0.51 13	--	--	--	18	229 228	1
07/02/68	70	4206	82 8.8	372	5 0.25 8	0 0.00 0	69 3.00 92	1 0.02 1	10 0.33 8	176 2.88 72	14 0.29 7	18 0.51 13	--	--	--	19	225 223#	1
07/17/68	70	1101	-- 8.1	367	5 0.25 6	0 0.00 0	87 3.78 93	1 0.02 1	0 0.00 0	211 3.46 84	7 0.14 3	18 0.51 12	0.0 0.00 0	--	--	0	329 222	1
08/06/68	70	4206	86 8.2	367	5 0.25 6	0 0.00 0	92 4.00 94	1 0.02 1	0 0.00 0	198 3.24 75	28 0.58 13	18 0.51 12	--	--	--	18	263 260	1
09/03/68	70	4206	82 9.0	354	6 0.30 8	0 0.00 0	79 3.44 91	1 0.02 1	16 0.53 12	168 2.75 64	23 0.48 11	20 0.56 13	--	--	--	15	244 243#	1
04S/12W-35C015 03/29/68	70	4206	75 7.8	532	218 10.88 59	27 2.22 12	121 5.26 28	5 0.13 1	0 0.00 0	126 2.06 11	58 1.21 7	530 14.95 82	--	--	--	18	1040 1039	65 55
04S/12W-35C025 03/29/68	70	4206	81 8.3	338	27 1.35 36	5 0.41 11	43 1.87 50	3 0.08 2	2 0.07 2	154 2.52 78	15 0.31 10	11 0.31 10	--	--	--	9	193 191#	8
04S/12W-36C015 04/05/68	70	4206	77 8.0	894	83 4.14 47	12 0.99 11	80 3.48 40	4 0.10 1	0 0.00 0	230 3.77 42	95 1.98 22	116 3.27 36	--	--	--	20	525 524	25 6
05S/12W-02J025 03/28/68	70	4206	79 8.7	378	8 0.40 9	1 0.08 2	89 3.87 88	1 0.02 1	8 0.27 7	160 2.62 72	0 0.00 0	27 0.76 21	--	--	--	16	230 229#	2
SAN FERNANDO HYDRO SUBUNIT U0580 SAN FERNANDO HYDRO SUBAREA U0581																		
01N/13W-20G015 09/27/68	70	5050	-- 7.5	588	50 2.49 41	20 1.64 27	46 2 33	0 0.00 0	-- 3.92 63	239 1.08 17	52 0.96 15	34 0.27 4	17.0 0.27 4	0.4	0.08	--	370 337	20
01N/14W-06P025 04/01/68	70	5050	-- 7.7	460	56 2.79 58	14 1.15 24	19 0.83 17	3 0.08 2	-- 3.10 65	189 0.81 17	39 0.59 12	21 0.24 5	15.0 0.24 5	0.4	0.15	--	225 261	19 2
01N/14W-06R075 04/01/68	70	5050	-- 7.6	497	62 3.09 60	14 1.15 22	18 0.78 15	5 0.13 2	-- 3.24 64	198 1.16 23	56 0.42 8	15 0.24 5	15.0 0.24 5	0.5	0.08	--	220 283	21 3
01N/14W-09H045 09/27/68	70	5050	68 7.6	543	58 2.89 49	20 1.64 28	28 1.22 21	5 0.13 2	-- 3.95 67	241 1.10 19	53 0.65 11	23 0.22 4	14.0 0.22 4	0.5	0.08	--	335 321	22 1
01N/15W-020025 04/01/68	70	5050	-- 7.5	1211	79 3.94 30	37 3.04 23	143 6.22 47	4 0.10 1	-- 3.01 23	184 8.04 61	386 2.06 16	73 0.09 1	5.5 0.09 1	0.7	0.39	--	832 820	34 18

TABLE E-1

MINERAL ANALYSES OF GROUND WATER

SOUTHERN CALIFORNIA

WELL NO. DATE	COUNTY TIME	LAB SAMPLER	TEMP PH	EC	MINERAL CONSTITUENTS IN				MILLIGRAMS PER LITER MILLIEQUIVALENTS PER LITER PERCENT REACTANCE VALUES				MILLIGRAMS PER LITER				TDS 180C (*105C) SUM	TM NCH	
					CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SI02			
LA-SAN GABRIEL RIVER HYDRO UNIT U0500																			
SAN FERNANDO HYDRO SUBUNIT				U0580															
SAN FERNANDO HYDRO SUBAREA				U0581															
7N/17W-12A01S	70	5050	--	800	104	13	56	2	0	300	100	62	0.0	0.6	0.08	--	510	313	
08/02/67	745	--	8.0		5.19	1.07	2.43	0.05	0.00	4.92	2.08	1.75	0.00				486	67	
					59	12	28	1	0	56	24	20	0						
7N/14W-29N02S	70	5050	--	481	49	9	45	3	0	249	29	17	4.0	0.2	0.04	--	295	160	
08/02/67	750	--	7.8		2.44	0.74	1.96	0.08	0.00	4.08	0.60	0.48	0.06				279	0	
					47	14	37	1	0	78	11	9	1						
7N/15W-33001S	70	5050	68	623	74	14	36	5	0	220	73	48	5.5	0.3	0.10	--	390	242	
08/03/67	1420	--	7.9		3.69	1.15	1.56	0.13	0.00	3.60	1.52	1.35	0.09				365	62	
					56	18	24	2	0	55	23	21	1						
SYLMAR HYDRO SUBAREA				U0582															
9/27/68	--	70	5050	--	652	77	17	34	5	0	226	78	45	6.0	0.4	0.12	--	427	262
			8.0		3.84	1.40	1.48	0.13	0.00	3.70	1.62	1.27	0.10				374	77	
					56	20	22	2	0	55	24	19	1						
VERDUGO HYDRO SUBAREA				U0584															
7N/13W-18N01S	70	5050	78	581	57	14	46	4	--	206	63	40	8.0	0.6	0.16	--	275	200	
03/29/68	945	--	7.7		2.84	1.15	2	0.10	--	3.38	1.31	1.13	0.13				334	31	
					47	19	33	2		57	22	19	2						
7N/13W-22N02S	70	5050	--	951	51	15	129	4	--	153	192	81	41.0	0.4	0.06	--	618	189	
08/27/68	1800	--	7.1		2.54	1.23	5.61	0.10	--	2.51	4.00	2.28	0.66				589	64	
					27	13	59	1		26	42	24	7						
7N/13W-28N01S	70	5050	72	738	71	28	33	4	0	153	70	63	116.0	0.2	0.02	--	480	292	
09/17/68	1300	--	6.7		3.54	2.30	1.43	0.10	0.00	2.51	1.46	1.78	1.87				461	167	
					48	31	19	1	0	33	19	23	25						
7N/13W-29F01S	70	5050	69	540	47	22	24	3	0	153	26	35	88.0	0.2	0.00	--	348	208	
09/17/68	1315	--	6.6		2.34	1.81	1.04	0.08	0.00	2.51	0.54	0.99	1.42				321	82	
					44	34	20	1	0	46	10	18	26						
7N/13W-33G01S	70	5050	71	672	63	27	28	4	0	153	38	52	114.0	0.3	0.03	--	442	268	
09/17/68	1330	--	6.7		3.14	2.22	1.22	0.10	0.00	2.51	0.79	1.47	1.84				402	143	
					47	33	18	1	0	38	12	22	28						
7N/13W-33R01S	70	5050	71	451	44	17	24	3	0	161	25	23	51.0	0.4	0.02	--	299	180	
09/17/68	1340	--	7.2		2.19	1.40	1.04	0.08	0.00	2.64	0.52	0.65	0.82				267	48	
					47	30	22	2	0	57	11	14	18						
RAYMOND HYDRO SUBUNIT				U05C0															
PASADENA HYDRO SUBAREA				U05C1															
7N/11W-07N01S	70	1101	--	360	43	13	14	2	--	170	22	10	13.8	2.1	--	0	289	160	
08/07/68	--	1101	7.9		2.14	1.07	0.61	0.05	--	2.79	0.46	0.28	0.22				204	21	
					55	28	16	1		74	12	7	6						
7N/11W-30H01S	70	1101	--	446	55	13	21	2	--	199	25	19	25.4	1.1	--	0	360	190	
08/07/68	--	1101	7.7		2.74	1.07	0.91	0.05	--	3.26	0.52	0.53	0.41				260	27	
					57	22	19	1		69	11	11	9						
7N/12W-09R01S	70	1101	68	251	21	7	21	1	--	103	5	10	25.0	0.9	--	0	193	81	
08/07/68	--	1101	7.8		1.05	0.57	0.91	0.02	--	1.69	0.10	0.28	0.40				142	0	
					41	22	36	1		68	4	11	16						
7N/12W-26C01S	70	1101	80	323	23	6	41	1	--	118	33	14	16.3	1.3	--	0	253	82	
08/07/68	--	1101	8.1		1.15	0.49	1.78	0.02	--	1.93	0.69	0.39	0.26				194	0	
					33	14	52	1		59	21	12	8						
7N/12W-34E01S	70	1101	--	352	36	9	25	2	--	136	22	18	22.0	0.8	--	0	270	126	
08/07/68	--	1101	7.9		1.80	0.74	1.09	0.05	--	2.23	0.46	0.51	0.35				202	14	
					49	20	30	1		63	13	14	10						
MONK HILL HYDRO SUBAREA				U05C2															
7N/12W-06M06S	70	1101	--	635	62	20	34	2	--	205	52	43	36.8	0.4	--	0	455	237	
08/06/68	--	1101	7.4		3.09	1.64	1.48	0.05	--	3.36	1.08	1.21	0.59				351	69	
					49	26	24	1		54	17	19	9						
7N/13W-01C01S	70	5050	--	1004	41	15	156	4	--	162	230	86	12.0	0.5	0.10	--	632	164	
08/27/68	1730	--	7.5		2.04	1.23	6.78	0.10	--	2.65	4.79	2.42	0.19				625	31	
					20	12	67	1		26	48	24	2						
SANTA ANITA HYDRO SUBAREA				U05C3															
7N/11W-21G02S	70	1101	70	413	39	7	43	2	--	169	33	14	25.5	0.9	--	0	333	126	
08/09/68	--	1101	7.7		1.95	0.57	1.87	0.05	--	2.77	0.69	0.39	0.41				248	0	
					44	13	42	1		65	16	9	10						
SAN GABRIEL VALLEY HYDRO SUBUNIT U05D0				U05D1															
7S/10W-03A01S	70	5868	77	529	71	12	14	3	--	238	35	10	18.0	0.1	0.19	14	295	227	
11/08/67	--	--	7.6		3.54	0.99	0.61	0.08	--	3.90	0.73	0.28	0.29				295	31	
					68	19	12	1		75	14	5	6						
7S/10W-03K03S	70	5868	77	695	89	16	23	3	--	276	40	20	52.0	0.4	0.08	23	403	288	
11/08/67	--	--	7.5		4.44	1.31	1	0.08	--	4.52	0.83	0.56	0.84				403	62	
					65	19	15	1		67	12	8	12						

TABLE E-1

MINERAL ANALYSES OF GROUND WATER

SOUTHERN CALIFORNIA

STATE WELL NO. DATE	COUNTY	LAB SAMPLER	TEMP PH	EC	MINERAL CONSTITUENTS IN				MILLIGRAMS PER LITER MILLIEQUIVALENTS PER LITER PERCENT REACTANCE VALUES				MILLIGRAMS PER LITER				TDS 180C (*105C) SUM	T NO
					CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SI02		
LA-SAN GABRIEL RIVER HYDRO UNIT U0500																		
SAN GABRIEL VALLEY HYDRO SUBUNIT U05D0																		
MAIN SAN GABRIEL HYDRO SUBAREA U05D1																		
01S/10W-04R02S 02/13/68 --	70	5868	75 7.4	650	102 5.09 67	19 1.56 20	20 0.87 11	4 0.10 1	-- 5.75 77	351 0.75 10	36 0.56 7	20 0.43 6	27.0	0.3	0.08	16	417 417	33 4
01S/10W-07A06S 11/28/67 --	70	1101	60 7.9	338	46 2.29 66	9 0.74 21	9 0.39 11	2 0.05 1	0 0.00 0	160 2.62 78	20 0.42 12	6 0.17 5	9.5	--	--	0	261 181	15 2
08/14/68 --	70	1101	60 7.9	338	47 2.34 65	9 0.74 21	10 0.43 12	3 0.08 2	0 0.00 0	180 2.95 82	18 0.37 10	6 0.17 5	5.6	0.4	--	0	279 188	15
01S/10W-07A07S 02/12/68 --	70	5868	73 7.8	316	45 2.24 66	8 0.66 19	10 0.43 13	3 0.08 2	-- 2.79 83	17 0.35 10	6 0.17 5	4.0	0.3	0.04	12	189 189	14	
01S/10W-08A01S 02/12/68 --	70	5868	75 7.6	603	88 4.39 66	17 1.40 21	18 0.78 12	4 0.10 1	-- 4.06 62	68 1.41 21	30 0.85 13	16.0	0.4	0.04	13	376 377	29 8	
01S/10W-08A02S 11/28/67 --	70	1101	65 7.9	621	88 4.39 66	17 1.40 21	17 0.74 11	3 0.08 1	0 0.00 0	238 3.90 58	70 1.46 22	32 0.90 13	27.7	--	--	0	492 372	28 9
08/14/68 --	70	1101	65 7.7	601	88 4.39 66	18 1.48 22	16 0.69 10	4 0.10 1	0 0.00 0	244 4.00 62	69 1.44 22	24 0.68 10	23.8	0.4	--	0	487 364	29 9
01S/10W-10C01S 11/28/67 --	70	1101	60 7.8	662	85 4.24 61	19 1.56 22	25 1.09 16	2 0.05 1	0 0.00 0	266 4.36 63	47 0.98 14	22 0.62 9	57.0	--	--	0	523 388	29 7
08/19/68 --	70	1101	68 7.8	575	70 3.49 57	19 1.56 25	23 1 16	4 0.10 2	0 0.00 0	248 4.06 66	40 0.83 13	21 0.59 10	42.0	0.3	--	0	467 342	25 4
01S/10W-12R01S 08/14/68 --	70	1101	70 7.5	589	63 3.14 51	18 1.48 24	34 1.48 24	3 0.08 1	0 0.00 0	181 2.97 50	50 1.04 18	30 0.85 14	65.6	0.7	--	0	445 354	23 8
01S/10W-13E01S 08/19/68 --	70	1101	71 8.1	564	59 2.94 51	17 1.40 24	31 1.35 23	4 0.10 2	0 0.00 0	174 2.85 49	53 1.10 19	24 0.68 12	70.0	0.6	--	0	432 345	21 7
01S/10W-14R01S 12/06/67 --	70	1101	68 7.8	528	59 2.94 54	15 1.23 23	26 1.13 21	4 0.10 2	0 0.00 0	188 3.08 55	50 1.04 19	20 0.56 10	55.7	--	--	0	417 323	20 5
08/19/68 --	70	1101	68 7.3	527	57 2.84 52	17 1.40 26	25 1.09 20	4 0.10 2	0 0.00 0	180 2.95 52	52 1.08 19	20 0.56 10	63.6	0.6	--	0	419 328	21 6
01S/10W-16B01S 11/08/67 --	70	5868	77 7.7	614	76 3.79 63	15 1.23 20	21 0.91 15	3 0.08 1	-- 3.67 61	44 0.92 15	20 0.56 9	56.0	0.2	0.06	23	368 369	25 6	
01S/10W-20B05S 08/14/68 --	70	1101	60 7.5	632	85 4.24 61	18 1.48 21	25 1.09 16	4 0.10 1	0 0.00 0	262 4.29 63	42 0.87 13	22 0.62 9	61.4	0.4	--	0	519 387	28 7
01S/10W-20R01S 08/14/68 --	70	1101	72 7.6	616	71 3.54 53	18 1.48 22	37 1.61 24	2 0.05 1	0 0.00 0	225 3.69 57	61 1.27 20	27 0.76 12	47.2	0.5	--	0	488 375	25 6
01S/10W-22C01S 08/14/68 --	70	1101	72 7.7	450	51 2.54 51	14 1.15 23	28 1.22 24	3 0.08 1	0 0.00 0	198 3.24 68	46 0.96 20	16 0.45 9	8.6	0.5	--	0	365 265	18 2
01S/10W-23K01S 08/14/68 --	70	1101	-- 7.5	717	76 3.79 48	23 1.89 24	48 2.09 27	2 0.05 1	0 0.00 0	228 3.74 48	124 2.58 33	38 1.07 14	24.7	0.5	--	0	564 449	28 9
01S/10W-31G04S 08/14/68 --	70	1101	71 7.8	502	54 2.69 49	14 1.15 21	36 1.56 28	4 0.10 2	0 0.00 0	220 3.60 67	40 0.83 16	19 0.53 10	23.3	0.5	--	0	410 299	19 1
01S/11W-02F01S 07/11/68 --	70	5868	82 7.4	538	78 3.89 60	21 1.73 27	18 0.78 12	2 0.05 1	-- 5.00 78	45 0.94 15	12 0.34 5	9.0	0.5	0.04	24	461 360	28 2	
01S/11W-02F02S 07/11/68 --	70	5868	78 7.3	664	96 4.79 61	26 2.14 27	19 0.83 11	2 0.05 1	-- 5.98 78	29 0.60 8	19 0.53 7	32.0	0.4	0.09	25	427 428	34 4	
01S/11W-02G01S 08/01/68 --	70	5868	77 7.9	637	89 4.44 59	26 2.14 28	20 0.87 12	2 0.05 1	-- 5.54 74	40 0.83 11	24 0.68 9	29.0	0.3	0.09	23	420 420	32 5	
08/07/68 --	70	1101	-- 7.5	658	94 4.69 62	22 1.81 24	22 0.96 13	2 0.05 1	-- 5.47 71	47 0.98 13	22 0.62 8	40.0	0.5	--	0	583 414	32 5	

TABLE E-1
MINERAL ANALYSES OF GROUND WATER

SOUTHERN CALIFORNIA

WELL NO. DATE	COUNTY TIME	LAB SAMPLER	TEMP PH	EC	MINERAL CONSTITUENTS IN										MILLIGRAMS PER LITER			TDS 180C (*105C) SUM	TH NCH
					CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SI02	MILLIEQUIVALENTS PER LITER PERCENT REACTANCE VALUES		
LA-SAN GABRIEL RIVER HYDRO UNIT U0500																			
N GABRIEL VALLEY HYDRO SUBUNIT U0500 MAIN SAN GABRIEL HYDRO SUBAREA U0501																			
S/11W-02H01S 8/01/68	70	5868	75 7.7	413	57 2.84 60	14 1.15 24	15 0.65 14	2 0.05 1	--	210 3.44 75	28 0.58 13	15 0.42 9	8.0 0.13 3	0.5	0.06	21	264 264	200 28	
S/11W-02J01S 1/28/67	70	1101	64 7.5	679	102 5.09 69	20 1.64 22	13 0.56 8	2 0.05 1	0	314 5.15 69	72 1.50 20	16 0.45 6	24.8 0.40 5	--	--	--	564 405	337 79	
1/28/67	70	1101	64 7.5	679	102 5.09 69	20 1.64 22	13 0.56 8	2 0.05 1	0	314 5.15 69	72 1.50 20	16 0.45 6	24.8 0.40 5	--	--	0	563 405	337 79	
8/19/68	70	1101	70 7.5	693	99 4.94 65	20 1.64 22	20 0.87 11	4 0.10 1	0	276 4.52 61	58 1.21 16	40 1.13 15	31.8 0.51 7	0.2	--	0	549 409	329 103	
S/11W-04L02S 7/11/68	70	5868	80 7.3	481	56 2.79 54	17 1.40 27	22 0.96 18	1 0.02 0	--	214 3.51 69	25 0.52 10	18 0.51 10	34.0 0.55 11	0.9	0.22	29	308 309	210 34	
8/07/68	70	1101	68 7.6	512	57 2.84 52	18 1.48 27	25 1.09 20	1 0.02 0	--	205 3.36 60	33 0.69 12	18 0.51 9	62.8 1.01 18	1.2	--	0	421 317	216 48	
S/11W-06D01S 8/07/68	70	1101	-- 8.0	347	33 1.65 44	7 0.57 15	34 1.48 39	2 0.05 1	--	150 2.46 67	37 0.77 21	12 0.34 9	6.8 0.11 3	0.9	--	0	282 207	111 0	
S/11W-07N02S 8/20/68	70	1101	70 7.6	350	39 1.95 53	10 0.82 22	20 0.87 24	1 0.02 1	0	180 2.95 82	15 0.31 9	10 0.28 8	2.3 0.04 1	0.9	--	0	278 187	138 0	
S/11W-10H01S 8/07/68	70	1101	68 7.6	400	50 2.49 56	12 0.99 22	20 0.87 19	4 0.10 2	--	201 3.29 75	26 0.54 12	12 0.34 8	12.5 0.20 5	0.5	--	0	338 236	174 9	
S/11W-10N06S 8/20/68	70	1101	63 7.8	400	50 2.49 59	13 1.07 25	15 0.65 15	1 0.02 1	0	209 3.42 81	19 0.39 9	10 0.28 7	8.3 0.13 3	0.6	--	0	325 220	178 7	
S/11W-11C04S 7/11/68	70	5868	80 7.4	383	53 2.64 61	12 0.99 23	15 0.65 15	2 0.05 1	--	203 3.33 79	22 0.46 11	13 0.37 9	3.0 0.05 1	0.3	0.09	22	242 243	182 15	
S/11W-11F04S 8/06/68	70	1101	65 7.2	340	43 2.14 62	10 0.82 24	10 0.43 13	2 0.05 1	--	153 2.51 71	26 0.54 15	15 0.42 12	4.8 0.08 2	0.2	--	0	264 187	148 22	
S/11W-12C02S 3/19/68	70	5050	-- 7.8	362	49 2.44 62	12 0.99 25	9 0.39 10	4 0.10 3	--	182 2.98 76	27 0.56 14	10 0.28 7	5.0 0.08 2	0.4	0.03	--	221 206	172 22	
S/11W-17B05S 8/20/68	70	1101	67 7.7	355	40 1.99 53	9 0.74 20	23 1 27	1 0.02 1	0	196 3.21 84	14 0.29 8	10 0.28 7	2.5 0.04 1	0.8	--	0	296 197	136 0	
S/11W-20L01S 8/20/68	70	1101	73 8.1	512	71 3.54 66	13 1.07 20	16 0.69 13	2 0.05 1	0	213 3.49 68	51 1.06 21	11 0.31 6	18.3 0.29 6	0.4	--	0	395 288	230 55	
S/12W-11N02S 8/07/68	70	1101	-- 7.9	417	42 2.09 48	10 0.82 19	32 1.39 32	2 0.05 1	--	169 2.77 64	27 0.56 13	21 0.59 14	23.3 0.37 9	0.6	--	0	326 241	146 7	
S/12W-14G01S 8/07/68	70	1101	-- 7.7	510	50 2.49 46	14 1.15 21	40 1.74 32	2 0.05 1	--	188 3.08 58	28 0.58 11	38 1.07 20	37.6 0.61 11	0.5	--	0	398 303	182 28	
S/12W-24E02S 8/20/68	70	1101	75 7.4	397	41 2.04 49	11 0.90 22	27 1.17 28	1 0.02 1	0	172 2.82 69	15 0.31 8	22 0.62 15	20.3 0.33 8	0.6	--	0	309 223	147 6	
S/09W-01E01S 0/23/67	70	1101	69 8.0	815	88 4.39 52	28 2.30 27	39 1.70 20	2 0.05 1	0	123 2.01 24	101 2.10 25	38 1.07 13	202.0 3.26 39	--	--	0	621 559	334 233	
S/09W-02H01S 0/23/67	70	1101	69 8.0	1050	114 5.69 51	37 3.04 27	56 2.43 22	2 0.05 0	0	140 2.29 20	161 3.35 30	80 2.26 20	212.0 3.42 30	--	--	0	802 731	436 321	
8/26/68	70	1101	73 7.7	1050	113 5.64 53	35 2.88 27	47 2.04 19	1 0.02 0	0	163 2.67 25	157 3.27 30	85 2.40 22	148.5 2.39 22	0.7	--	0	750 668	426 292	
S/09W-02Q01S 0/23/67	70	1101	69 7.6	617	61 3.04 49	19 1.56 25	37 1.61 26	2 0.05 1	0	145 2.38 38	54 1.12 18	33 0.93 15	110.0 1.77 29	--	--	0	461 388	230 111	
8/26/68	70	1101	72 7.2	640	65 3.24 50	19 1.56 24	37 1.61 25	2 0.05 1	0	200 3.28 49	61 1.27 19	33 0.93 14	76.0 1.22 18	0.6	--	0	493 392	240 76	

TABLE E-1

MINERAL ANALYSES OF GROUND WATER

SOUTHERN CALIFORNIA

STATE WELL NO. DATE	COUNTY	LAB TIME	TEMP SAMPLER PH	EC	MILLIGRAMS PER LITER MINERAL CONSTITUENTS IN MILLIEQUIVALENTS PER LITER PERCENT REACTANCE VALUES										MILLIGRAMS PER LITER			TDS 180C (*105C) SUM
					CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SI02		
LA-SAN GABRIEL RIVER HYDRO UNIT U0500																		
SAN GABRIEL VALLEY HYDRO SUBUNIT U0500																		
MAIN SAN GABRIEL HYDRO SUBAREA U0501																		
01S/09W-03C01S 08/26/68 --	70	1101	93 7.4	591	61 3.04 49	24 1.97 32	25 1.09 18	2 0.05 1	0 0.00 0	254 4.16 65	55 1.14 18	20 0.56 9	31.8 0.51 8	0.9	--	0	473 345	
01S/09W-04R01S 10/23/67 --	70	1101	70 7.9	668	68 3.39 48	23 1.89 27	38 1.65 24	2 0.05 1	0 0.00 0	147 2.41 35	57 1.19 17	44 1.24 18	130.0 2.10 30	--	--	0	509 435	
08/26/68 --	70	1101	73 7.7	685	79 3.94 57	17 1.40 20	35 1.52 22	2 0.05 1	0 0.00 0	200 3.28 49	60 1.25 19	25 0.70 11	88.0 1.42 21	0.7	--	0	506 405	
01S/09W-27R07S 08/27/68 --	70	1101	80 7.1	1030	120 5.99 54	23 1.89 17	71 3.09 28	2 0.05 0	0 0.00 0	309 5.06 47	131 2.73 25	83 2.34 21	45.2 0.73 7	0.2	--	0	784 628	
01S/09W-34B01S 10/23/67 --	70	1101	77 8.1	817	117 5.84 63	23 1.89 20	33 1.43 16	2 0.05 0	0 0.00 0	288 4.72 50	140 2.91 31	34 0.96 10	50.3 0.81 9	--	--	0	687 541	
02S/10W-08E01S 11/27/67 --	70	1101	68 7.8	752	83 4.14 51	21 1.73 21	50 2.17 27	1 0.02 0	0 0.00 0	262 4.29 53	60 1.25 16	70 1.97 25	31.3 0.50 6	--	--	0	578 446	
08/19/68 --	70	1101	67 7.6	1270	129 6.44 45	41 3.37 24	100 4.35 31	3 0.08 0	0 0.00 0	358 5.87 41	240 5.00 35	109 3.07 21	28.8 0.46 3	0.4	--	0	1009 828	
02S/10W-16B01S 08/19/68 --	70	1101	67 7.4	1270	129 6.44 45	40 3.29 23	99 4.31 30	4 0.10 1	0 0.00 0	351 5.75 40	250 5.20 36	107 3.02 21	30.4 0.49 3	0.4	--	0	1010 833	
02S/11W-05G04S 08/20/68 --	70	1101	63 7.7	424	58 2.89 66	9 0.74 17	16 0.69 16	3 0.08 2	0 0.00 0	187 3.06 72	46 0.96 23	6 0.17 4	3.0 0.05 1	0.4	--	0	328 234	
02S/11W-06B01S 08/20/68 --	70	1101	78 7.8	818	117 5.84 64	25 2.05 22	27 1.17 13	3 0.08 1	0 0.00 0	364 5.96 64	116 2.41 26	33 0.93 10	1.8 0.03 0	0.4	--	0	687 503	
01N/09W-29M01S 11/28/67 --	70	1101	60 7.9	386	52 2.59 64	12 0.99 24	10 0.43 11	2 0.05 1	0 0.00 0	199 3.26 78	28 0.58 14	8 0.22 5	6.5 0.10 2	--	--	0	317 217	
08/19/68 --	70	1101	67 7.9	435	56 2.79 60	13 1.07 23	15 0.65 14	4 0.10 2	0 0.00 0	205 3.36 71	36 0.75 16	12 0.34 7	16.5 0.27 6	0.3	--	0	357 254	
01N/11W-21G02S 07/11/68 --	70	5868	80 7.5	380	39 1.95 45	7 0.57 13	40 1.74 40	2 0.05 1	-- 2.87 68	175 0.62 15	30 0.42 10	15 0.42 10	20.0 0.32 8	0.8	0.11	23	263 263	
01N/11W-21G05S 07/11/68 --	70	5868	80 7.8	397	36 1.80 40	3 0.25 5	56 2.43 54	1 0.02 1	-- 2.97 66	181 0.60 13	29 0.45 10	16 0.45 10	30.0 0.48 11	0.9	0.13	18	279 279	
01N/11W-21H02S 07/11/68 --	70	5868	78 7.3	469	51 2.54 47	11 0.90 17	44 1.91 35	2 0.05 1	-- 3.38 63	206 1.10 21	53 0.51 9	18 0.35 7	22.0 0.35 7	0.8	0.15	23	326 327	
01N/11W-21H03S 07/11/68 --	70	5868	80 7.5	452	47 2.34 45	9 0.74 14	48 2.09 40	1 0.02 0	-- 3.41 66	208 1.14 22	55 0.45 9	16 0.16 3	10.0 0.16 3	0.9	0.15	22	311 312	
01N/11W-26L07S 08/20/68 --	70	1101	67 7.5	785	93 4.64 57	20 1.64 20	40 1.74 21	4 0.10 1	0 0.00 0	221 3.62 44	116 2.41 29	53 1.49 18	42.2 0.68 8	0.3	--	0	589 478	
01N/11W-27F01S 07/11/68 --	70	5868	78 7.1	388	48 2.39 57	13 1.07 26	15 0.65 16	2 0.05 1	-- 2.82 67	172 0.39 9	19 0.39 9	14 0.39 9	37.0 0.60 14	0.5	0.09	24	258 258	
01N/11W-29M01S 07/11/68 --	70	5868	80 7.5	593	83 4.14 60	19 1.56 23	26 1.13 16	2 0.05 1	-- 4.06 59	248 1.58 23	76 0.56 8	20 0.64 9	40.0 0.64 9	0.9	0.15	27	416 416	
01N/11W-30H01S 08/01/68 --	70	5868	75 7.7	397	49 2.44 56	12 0.99 22	21 0.91 21	2 0.05 1	-- 3.31 75	202 0.44 10	21 0.51 11	18 0.14 3	9.0 0.14 3	1.0	0.31	23	256 256	
01N/11W-30R01S 04/19/68 --	70	5868	73 8.1	347	34 1.70 46	7 0.57 16	31 1.35 37	2 0.05 1	-- 2.62 71	160 0.60 16	29 0.31 8	11 0.13 3	8.0 0.13 3	1.2	0.17	18	220 220	
07/11/68 --	70	5868	81 7.5	531	72 3.59 60	16 1.31 22	23 1 17	2 0.05 1	-- 3.44 57	210 0.94 16	45 0.73 12	26 0.87 15	54.0 0.87 15	0.7	0.13	27	372 370	
01N/11W-32Q02S 07/11/68 --	70	5868	80 7.3	459	55 2.74 53	16 1.31 25	25 1.09 21	1 0.02 0	-- 3.11 61	190 0.56 11	27 0.59 12	21 0.82 16	51.0 0.82 16	0.9	0.15	27	317 318	

TABLE E-1

MINERAL ANALYSES OF GROUND WATER

SOUTHERN CALIFORNIA

SITE NO. DATE	WELL NO. TIME	COUNTY	LAB SAMPLER	TEMP PH	EC	MINERAL CONSTITUENTS IN				MILLIGRAMS PER LITER MILLIEQUIVALENTS PER LITER PERCENT REACTANCE VALUES				MILLIGRAMS PER LITER				TDS 180C (*105C) SUM	TH NCH
						CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SI02		
LA-SAN GABRIEL RIVER HYDRO UNIT U0500																			
SAN GABRIEL VALLEY HYDRO SUBUNIT U0500																			
MAIN SAN GABRIEL HYDRO SUBAREA U0501																			
11/11/68	34N03S	70	5868	78	318	42	9	18	1	--	188	9	8	3.0	0.8	0.09	25	209	142
				7.6		2.09	0.74	0.78	0.02		3.08	0.19	0.22	0.05				209	0
						57	20	21	1		87	5	6	1					
11/11/68	34N05S	70	5868	78	317	38	10	20	1	--	166	11	11	15.0	0.9	0.13	24	215	136
				7.5		1.90	0.82	0.87	0.02		2.72	0.23	0.31	0.24				213	0
						52	23	24	1		78	6	9	7					
LOWER CANYON HYDRO SUBAREA U0502																			
10/19/68	10W-27C01S	70	1101	63	431	59	11	13	4	0	206	33	11	15.0	0.4	--	0	352	192
				7.8		2.94	0.90	0.56	0.10	0.00	3.38	0.69	0.31	0.24				248	23
						65	20	12	2	0	73	15	7	5					
10/28/67	10W-29K01S	70	1101	59	392	49	12	18	2	0	192	24	9	7.3	--	--	0	313	171
				7.9		2.44	0.99	0.78	0.05	0.00	3.15	0.50	0.25	0.12				216#	13
						57	23	18	1	0	78	12	6	3					
11/14/68	10W-29K01S	70	1101	75	424	55	12	18	4	0	210	33	9	5.0	0.4	--	0	346	186
				7.8		2.74	0.99	0.78	0.10	0.00	3.44	0.69	0.25	0.08				240	14
						59	21	17	2	0	77	15	6	2					
11/19/68	10W-32J02S	70	1101	61	337	45	11	8	4	0	168	23	4	0.0	0.4	--	0	263	157
				7.9		2.24	0.90	0.35	0.10	0.00	2.75	0.48	0.11	0.00				178#	19
						62	25	10	3	0	82	14	3	0					
UPPER CANYON HYDRO SUBAREA U0503																			
10/19/68	10W-03C03S	70	1101	68	569	74	15	23	4	0	240	40	22	41.8	0.2	--	0	460	246
				7.9		3.69	1.23	1	0.10	0.00	3.93	0.83	0.62	0.67				338	49
						61	20	17	2	0	65	14	10	11					
10/21/68	10W-23C01S	70	1101	63	446	51	12	22	3	0	192	51	12	4.8	0.4	--	0	348	176
				7.9		2.54	0.99	0.96	0.08	0.00	3.15	1.06	0.34	0.08				251	18
						56	22	21	2	0	68	23	7	2					
LA HABRA HYDRO SUBUNIT U05E0																			
POMONA HYDRO SUBAREA U05E2																			
11/18/68	08W-18J02S	70	5868	81	268	9	0	70	1	11	114	36	9	25.0	0.1	0.07	12	267	22
				8.8		0.45	0.00	3.04	0.02	0.37	1.87	0.75	0.25	0.40				230	0
						13	0	86	1	10	51	21	7	11					
10/23/67	08W-19A02S	70	1101	72	625	76	13	39	2	0	210	91	36	22.0	--	--	0	489	243
				8.1		3.79	1.07	1.70	0.05	0.00	3.44	1.89	1.01	0.35				383	71
						57	16	26	1	0	51	28	15	5					
10/27/68	08W-19A02S	70	1101	75	420	27	4	62	1	0	130	56	9	36.2	0.3	--	0	325	83
				7.7		1.35	0.33	2.70	0.02	0.00	2.13	1.16	0.25	0.58				260#	0
						31	7	61	1	0	51	28	6	14					
LIVE OAK HYDRO SUBAREA U05E3																			
11/18/68	08W-04L01S	70	5868	82	665	79	9	42	2	--	181	72	16	98.0	0.2	0.15	23	490	234
				7.9		3.94	0.74	1.83	0.05		2.97	1.50	0.45	1.58				431	86
						60	11	28	1		46	23	7	24					
10/23/67	08W-05A01S	70	1101	58	865	99	28	65	1	0	150	145	36	215.0	--	--	0	739	362
				8.1		4.94	2.30	2.83	0.02	0.00	2.46	3.02	1.01	3.47				663	239
						49	23	28	0	0	25	30	10	35					
10/26/68	08W-05A01S	70	1101	75	758	70	20	43	1	0	30	158	44	151.5	0.6	--	0	518	257
				8.4		3.49	1.64	1.87	0.02	0.00	0.49	3.29	1.24	2.44				503#	232
						50	23	27	0	0	7	44	17	33					
ANAHEIM HYDRO SUBUNIT U05F0																			
ANAHEIM HYDRO SUBAREA U05F1																			
10/03/67	08W-33K02S	30	3102	--	1700	172	68	110	3	0	365	468	129	0.2	0.6	0.15	20	1240	709
				7.2		8.58	5.59	4.78	0.08	0.00	5.98	9.74	3.64	0.00				1151	410
						45	29	25	0	0	31	50	19	0					
10/03/67	09W-32H03S	30	3102	--	1270	--	--	--	--	0	221	296	104	27.0	--	--	--	--	--
				7.6						0.00	3.62	6.16	2.93	0.43				--	--
																		--	--
10/25/67	09W-32P04S	30	3102	--	1120	--	--	--	--	0	212	239	92	--	--	--	--	--	--
				7.4						0.00	3.47	4.97	2.59	--	--	--	--	--	--
																		--	--
10/03/67	09W-34M01S	30	3102	--	1270	126	29	--	--	0	225	294	107	18.0	--	--	--	--	434
				7.4		6.29	2.38	--	--	0.00	3.69	6.12	3.02	0.29				--	249
10/09/67	10W-36H01S	30	3102	--	754	--	--	--	--	0	245	90	57	--	--	--	--	--	--
				7.5						0.00	4.01	1.87	1.61	--	--	--	--	--	--
																		--	--
10/09/67	10W-01B01S	30	3102	--	1180	--	--	--	--	0	149	--	102	--	--	--	--	--	--
				7.4						0.00	2.44	--	2.88	--	--	--	--	--	--
																		--	--
LA HABRA HYDRO SUBAREA U05F2																			
10/09/67	10W-02N02S	30	3102	--	1450	--	--	--	--	0	300	--	126	110.0	--	--	--	--	--
				7.3						0.00	4.92	--	3.55	1.77				--	--

TABLE E-1
MINERAL ANALYSES OF GROUND WATER

SOUTHERN CALIFORNIA

STATE WELL NO. DATE	COUNTY	LAB TIME	TEMP SAMPLER PH	EC	MINERAL CONSTITUENTS IN				MILLIGRAMS PER LITER MILLIEQUIVALENTS PER LITER PERCENT REACTANCE VALUES				MILLIGRAMS PER LITER				TDS 180C (*105C) SUM	
					CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SI02		
LA-SAN GABRIEL RIVER HYDRO UNIT U0500																		
ANAHEIM HYDRO SUBUNIT				U05F0														
LA HABRA HYDRO SUBAREA				U05F2														
03S/10W-04D01S 11/09/67 1315	30	3102	-- 7.4	1560	--	--	--	--	0 0.00	346 5.67	--	113 3.19	0.0 0.00	--	--	--	--	
03S/10W-07H03S 11/09/67 1345	30	3102	-- 7.2	1640	172 8.58 56	32 2.63 17	94 4.09 26	4 0.10 1	0 0.00 0	262 4.29 27	83 1.73 11	288 8.12 52	95.0 1.53 10	--	0.08	60	1110 957	
03S/10W-10M01S 11/09/67 1200	30	3102	-- 7.5	964	--	--	--	--	0 0.00	256 4.19	--	107 3.02	44.0 0.71	--	--	--	--	
03S/10W-10M02S 11/09/67 1145	30	3102	-- 7.4	960	--	--	--	--	0 0.00	220 3.60	--	92 2.59	110.0 1.77	--	--	--	--	
03/18/68 1130	30	5102	-- 7.6	925	--	--	--	--	0 0.00	226 3.70	--	90 2.54	93.0 1.50	--	--	--	--	
03S/10W-11M02S 11/00/67 --	30	3102	-- 7.6	1820	--	--	--	--	0 0.00	381 6.24	--	194 5.47	138.0 2.22	--	--	--	--	
03S/10W-15B01S 11/09/67 1415	30	3102	-- 7.3	1540	--	--	--	--	0 0.00	321 5.26	--	153 4.31	53.0 0.85	--	--	--	--	
YORBA LINDA HYDRO SUBAREA				U05F3														
03S/09W-02P01S 11/06/67 1200	30	3102	-- 7.8	6560	--	--	--	--	133 4.43	2880 47.20	--	885 24.96	0.0 0.00	--	--	--	--	
03/14/68 1430	30	5102	-- 8.2	6670	--	--	--	--	327 10.90	2500 40.97	--	940 26.51	0.0 0.00	--	--	--	--	
03S/09W-21D01S 10/25/67 1530	30	3102	-- 7.5	1040	--	--	--	--	0 0.00	396 6.49	--	61 1.72	0.1 0.00	--	--	--	--	
03/11/68 1330	30	5102	-- 7.6	1020	--	--	--	--	0 0.00	400 6.55	--	67 1.89	0.1 0.00	--	--	--	--	
03S/09W-21D02S 10/25/67 1500	30	3102	-- 7.5	1080	--	--	--	--	0 0.00	435 7.13	--	54 1.52	0.1 0.00	--	--	--	--	
03/11/68 1345	30	5102	-- 7.6	1080	47 2.34 20	31 2.55 22	148 6.44 56	4 0.10 1	0 0.00 0	435 7.13 61	138 2.87 24	60 1.69 14	0.4 0.01 0	0.2	0.18	21	682 664	
03S/09W-21M01S 11/06/67 1100	30	3102	-- 7.3	1780	--	--	--	--	0 0.00	363 5.95	--	255 7.19	149.0 2.40	--	--	--	--	
03/14/68 --	30	5102	-- 7.3	1750	--	--	--	--	0 0.00	368 6.03	--	254 7.16	159.0 2.56	--	--	--	--	
03S/09W-21M02S 11/06/67 1130	30	3102	-- 7.9	942	--	--	--	--	0 0.00	387 6.34	--	67 1.89	0.0 0.00	--	--	--	--	
03/14/68 --	30	5102	-- 8.0	942	--	--	--	--	0 0.00	391 6.41	--	70 1.97	0.0 0.00	--	--	--	--	
03S/09W-28L02S 10/25/67 1315	30	3102	-- 7.1	1340	--	--	--	--	0 0.00	325 5.33	--	258 7.27	0.1 0.00	--	--	--	--	
03/11/68 1130	30	5102	-- 7.2	1340	--	--	--	--	0 0.00	333 5.46	--	282 7.95	--	--	--	--	--	
03S/09W-32C01S 04/03/68 1345	30	5102	-- 8.1	656	28 1.40	9 0.74	--	--	0 0.00	260 4.26	--	56 1.58	0.0 0.00	--	0.10	--	--	
03S/09W-32H03S 03/11/68 1030	30	5102	-- 7.7	1270	132 6.59 49	29 2.38 18	100 4.35 32	4 0.10 1	0 0.00 0	239 3.92 28	293 6.10 44	120 3.38 24	25.0 0.40 3	0.6	0.06	21	919 843	
09/24/68 1430	30	3102	-- 7.7	1370	--	--	--	--	0 0.00	237 3.88	304 6.33	123 3.47	34.0 0.55	--	--	--	--	
03S/09W-32P04S 03/14/68 --	30	5102	-- 7.6	1130	112 5.59 47	25 2.05 17	92 4.00 34	5 0.13 1	0 0.00 0	220 3.60 30	240 5.00 42	106 2.99 25	16.0 0.26 2	0.3	0.06	19	751 724	
09/24/68 1410	30	3102	66 7.5	1130	--	--	--	--	0 0.00	207 3.39	247 5.14	102 2.88	12.0 0.19	--	--	--	--	
03S/09W-33H01S 10/03/67 1315	30	3102	-- 7.6	820	67 3.34 41	12 0.99 12	84 3.65 45	3 0.08 1	0 0.00 0	231 3.79 47	103 2.14 27	75 2.11 26	0.1 0.00 0	0.4	0.15	--	490 459	
03/11/68 1045	30	5102	-- 7.6	892	75 3.74 42	15 1.23 14	88 3.83 43	3 0.08 1	0 0.00 0	258 4.23 46	112 2.33 25	92 2.59 28	0.7 0.01 0	0.4	0.12	15	563 529	
09/27/68 --	30	3102	-- 7.4	978	--	--	--	--	0 0.00	269 4.41	119 2.48	100 2.82	3.6 0.06	--	--	--	--	
03S/09W-33K01S 10/03/67 1330	30	3102	-- 7.5	1160	--	--	--	--	0 0.00	207 3.39	262 5.45	102 2.88	10.0 0.16	--	--	--	--	

TABLE E-1
 MINERAL ANALYSES OF GROUND WATER
 SOUTHERN CALIFORNIA

WELL NO. DATE	COUNTY TIME	LAB SAMPLER	TEMP PH	EC	MINERAL CONSTITUENTS IN				MILLIGRAMS PER LITER MILLIEQUIVALENTS PER LITER PERCENT REACTANCE VALUES				MILLIGRAMS PER LITER				TDS 180C (*105C) SUM	TH NCM			
					CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SI02					
LA-SAN GABRIEL RIVER HYDRO UNIT U0500																					
LAHEIM HYDRO SUBUNIT U05F0																					
YORBA LINDA HYDRO SUBAREA U05F3																					
S/09W-33K01S 3/11/68 1040	30	5102	66 7.5	1120	--	--	--	--	0 0.00	216 3.54	254 5.29	108 3.04	8.0 0.13	--	--	--	--	--			
S/09W-34M01S 3/11/68 1100	30	5102	-- 7.5	1240	--	--	--	--	0 0.00	229 3.75	273 5.68	116 3.27	14.0 0.22	--	--	--	--	--			
S/09W-35Q01S 3/11/68 1115	30	5102	-- 7.6	1160	--	--	--	--	0 0.00	187 3.06	299 6.22	104 2.93	0.5 0.01	--	--	--	--	--			
S/10W-02N02S 3/18/68 1130	30	5102	-- 7.5	1470	--	--	--	--	0 0.00	307 5.03	--	133 3.75	115.0 1.85	--	--	--	--	--			
S/10W-07H03S 3/18/68 1230	30	5102	-- 7.3	1750	184 9.18 53	37 3.04 17	118 5.13 29	1 0.02 0	0 0.00 0	274 4.49 26	87 1.81 11	334 9.42 55	82.0 1.32 8	0.4	0.10	58	1110 1037	612 387			
S/10W-10M01S 3/18/68 --	30	5102	-- 7.6	969	--	--	--	--	0 0.00	253 4.15	--	110 3.10	42.0 0.68	--	--	--	--	--			
S/10W-11M02S 3/18/68 --	30	5102	-- 7.7	1820	--	--	--	--	0 0.00	406 6.65	--	202 5.70	122.0 1.97	--	--	--	--	--			
S/10W-36H01S 3/22/68 --	30	5102	-- 7.8	727	--	--	--	--	0 0.00	243 3.98	80 1.66	56 1.58	8.0 0.13	--	--	--	--	--			
S/10W-01F01S 3/14/68 1330	30	5102	-- 7.6	1170	125 6.24 50	25 2.05 16	95 4.13 33	5 0.13 1	0 0.00 0	162 2.65 21	310 6.45 52	108 3.04 25	14.0 0.22 2	0.5	0.05	22	822 785	415 282			

TABLE E-1
MINERAL ANALYSES OF GROUND WATER
SOUTHERN CALIFORNIA

STATE WELL NO. DATE	COUNTY	LAB SAMPLER	TEMP PH	EC	MINERAL CONSTITUENTS IN				MILLIGRAMS PER LITER MILLIEQUIVALENTS PER LITER PERCENT REACTANCE VALUES				MILLIGRAMS PER LITER				TDS 180C (*105C) SUM
					CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SI02	
UPPER OWENS HYDRO SUBUNIT					OWENS HYDRO UNIT				W0300								
08S/32E-17FS1M 02/16/68 1300	14	5050	138 8.7	878	9 0.45	0 0.00	161 7.00	5 0.13	-- --	-- --	72 1.50	182 5.13	-- --	7.8	0.64	--	474 --
DEATH VALLEY HYDRO SUBUNIT					AMARGOSA HYDRO UNIT				W0900								
DEATH VALLEY HYDRO SUBAREA					W09A1												
18N/05E-14J01S 05/02/68 1635	36	5050	79 7.6	7364	126 6.29 8	112 9.21 12	1379 59.99 78	52 1.33 2	-- --	190 3.11 4	763 15.88 21	2009 56.65 75	3.5 0.06 0	4.8	9.00	--	4763 4552
24N/01E-27D01S 04/27/68 1040	14	5050	85 7.5	692	48 2.39 33	18 1.48 21	74 3.22 45	4 0.10 1	-- --	130 2.13 30	179 3.73 53	43 1.21 17	0.0 0.00 0	0.9	0.68	--	495 432
24N/01E-27D02S 04/27/68 1315	14	5050	-- 7.3	514	33 1.65 32	14 1.15 22	53 2.30 44	4 0.10 2	-- --	137 2.24 43	99 2.06 39	32 0.90 17	1.0 0.02 0	1.1	0.38	--	402 305
25N/01E-28E01S 04/27/68 830	14	5050	80 7.5	3350	114 5.69 17	56 4.60 14	531 23.10 68	18 0.46 1	-- --	117 1.92 6	491 10.22 30	781 22.02 64	0.0 0.00 0	2.1	8.00	--	2141 2059
25N/01E-28M01S 04/27/68 815	14	5050	78 7.3	3285	113 5.64 18	66 5.43 17	469 20.40 64	9 0.23 1	-- --	126 2.06 6	164 3.41 11	938 26.45 83	0.0 0.00 0	0.1	1.40	--	2097 1823
AMARGOSA HYDRO SUBUNIT					W09D0												
AMARGOSA HYDRO SUBAREA					W09D2												
21N/07E-33PS1S 02/15/68 1630	14	5050	108 8.2	3564	5 0.25 1	1 0.08 0	816 35.49 97	29 0.74 2	-- --	700 11.47 32	540 11.24 32	454 12.80 36	0.0 0.00 0	4.8	8.80	--	2252 2203
COYOTE HYDRO UNIT					W1800												
11N/02E-08K01S 05/29/68 --	36	5050	-- 7.7	1500	53 2.64 18	15 1.23 8	241 10.48 72	6 0.15 1	-- --	121 1.98 14	347 7.22 50	187 5.27 36	3.5 0.06 0	3.7	4.20	--	968 920
12N/02E-32C01S 05/29/68 --	36	5050	-- 7.7	1008	27 1.35 14	10 0.82 9	163 7.09 75	5 0.13 1	-- --	110 1.80 19	249 5.18 56	79 2.23 24	4.5 0.07 1	6.6	0.65	--	598 599
WINGATE PASS HYDRO SUBUNIT					PANAMINT HYDRO UNIT				W2000								
22S/44E-09G01M 01/17/68 --	14	5050	76 7.7	133000	3800 189.62 7	1500 123.362797.05 4	64300 50.01 88	1955 50.01 2	-- --	60 0.98 0	1250 26.022819.97 1	99999 99 99	0.0 0.00 0	0.0	53.00	--	198000 172887#150
22S/44E-09G02M 12/29/67 --	14	5050	75 7.8	146000	3300 164.67 4	1870 153.793397.35 4	78100 59.86 90	2340 59.86 2	-- --	144 2.36 0	2880 59.962819.97 2	99999 99 98	18.0 0.29 0	0.0	--	--	222000 188578#150
ANTELOPE HYDRO SURUNIT					ANTELOPE HYDRO UNIT				W2600								
CHAFEE HYDRO SUBAREA					W26A1												
11N/12W-32E01S 06/03/68 --	15	5050	-- 8.2	553	53 2.64 49	7 0.57 11	48 2.09 39	2 0.05 1	0 0.00 0	125 2.05 39	134 2.79 53	13 0.37 7	3.5 0.06 1	0.3	0.10	--	331 323
GLOSTER HYDRO SUBAREA					W26A2												
10N/13W-24C02S 06/03/68 --	15	5050	-- 8.2	401	27 1.35 36	4 0.33 9	46 2 54	1 0.02 1	0 0.00 0	104 1.70 47	67 1.39 39	16 0.45 12	4.1 0.07 2	0.2	0.10	--	210 217
WILLOW SPRINGS HYDRO SUBAREA					W26A3												
09N/13W-07R04S 06/04/68 --	15	5050	-- 8.4	450	30 1.50 36	4 0.33 8	53 2.30 55	2 0.05 1	1 0.03 1	119 1.95 47	76 1.58 38	19 0.53 13	0.2 0.00 0	0.4	0.20	--	232 245
10N/13W-32D01S 06/04/68 --	15	5050	75 8.2	557	46 2.29 41	12 0.99 17	53 2.30 41	2 0.05 1	0 0.00 0	205 3.36 62	67 1.39 26	21 0.59 11	4.8 0.08 1	0.3	0.10	--	292 307
11N/14W-14R02S 06/03/68 --	15	5050	-- 8.5	1040	77 3.84 34	48 3.95 35	82 3.57 31	2 0.05 0	13 0.43 4	519 8.51 75	86 1.79 16	20 0.56 5	1.2 0.02 0	1.5	0.60	--	615 587

TABLE E-1
MINERAL ANALYSES OF GROUND WATER

SOUTHERN CALIFORNIA

WELL NO. DATE	COUNTY	LAB SAMPLER	TEMP PH	EC	MINERAL CONSTITUENTS IN				MILLIGRAMS PER LITER MILLIEQUIVALENTS PER LITER PERCENT REACTANCE VALUES				MILLIGRAMS PER LITER				TDS 180C (*105C) SUM	TH NCH	
					CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SI02			
LANCASTER HYDRO SUBAREA					W26A5														
12E-32H015	70	5050	68	2152	244	110	110	2	0	227	740	178	87.0	0.7	0.14	--	1737	1062	
1/14/68	--	--	7.9		12.17	9.05	4.78	0.05	0.00	3.72	15.41	5.02	1.40				1584	876	
					47	35	18	0	0	15	60	20	5						
10W-05H015	70	5050	--	383	43	13	18	3	--	181	46	5	1.8	0.3	0.02	--	234	161	
1/04/67	1100	--	8.3		2.14	1.07	0.78	0.08		2.97	0.96	0.14	0.03				220	--	
					53	26	19	2		72	23	3	1						
10/05/68	--	70	5050	--	412	45	13	18	4	0	182	43	5	2.2	0.3	0.10	--	198	166
						2.24	1.07	0.78	0.10	0.00	2.98	0.89	0.14	0.03				221	17
						53	25	19	2	0	74	22	3	1					
12W-24C015	70	1101	--	311	16	5	50	1	0	160	24	12	0.0	--	--	0	268	60	
1/09/67	--	1101	8.5		0.80	0.41	2.17	0.02	0.00	2.62	0.50	0.34	0.00				187	0	
					23	12	64	1	0	76	14	10	0						
09W-30F015	70	5050	--	351	19	6	42	4	--	117	55	7	9.0	0.4	0.04	--	192	72	
1/04/67	1200	--	7.5		0.95	0.49	1.83	0.10		1.92	1.14	0.20	0.14				200	0	
					28	15	54	3		56	34	6	4						
10W-06R015	70	5050	--	354	34	6	30	3	0	147	40	4	1.3	0.2	0.10	--	194	110	
1/05/68	--	--	8.3		1.70	0.49	1.30	0.08	0.00	2.41	0.83	0.11	0.02				191	0	
					47	14	36	2	0	71	25	3	1						
12W-34J015	70	5050	--	250	12	2	39	1	--	120	15	5	4.0	0.4	0.00	--	154	38	
1/28/67	--	--	8.2		0.60	0.16	1.70	0.02		1.97	0.31	0.14	0.06				138	0	
					24	7	68	1		79	13	6	3						
13W-35E015	70	5050	--	711	37	3	105	2	--	139	86	80	28.5	0.6	0.02	--	421	105	
1/28/67	--	--	8.1		1.85	0.25	4.57	0.05		2.28	1.79	2.26	0.46				411	0	
					27	4	68	1		34	26	33	7						
14W-10F015	70	5050	73	370	36	3	34	2	0	156	11	14	20.0	0.3	0.00	--	203	102	
1/04/68	--	--	8.1		1.80	0.25	1.48	0.05	0.00	2.56	0.23	0.39	0.32				197	0	
					50	7	41	1	0	73	6	11	9						
12W-21C015	70	5050	--	428	26	6	53	2	--	129	28	44	7.5	0.7	0.23	--	246	90	
1/28/67	--	--	7.7		1.30	0.49	2.30	0.05		2.11	0.58	1.24	0.12				231	0	
					31	12	56	1		52	14	31	3						
10/04/68	--	70	5050	--	465	28	6	54	1	0	131	26	48	8.4	0.7	0.30	--	245	95
						1.40	0.49	2.35	0.02	0.00	2.15	0.54	1.35	0.13				237	0
						33	12	55	1	0	51	13	32	3					
12W-34P025	70	5050	--	279	31	5	20	1	--	154	12	2	0.0	0.4	0.00	--	163	98	
1/29/67	--	--	8.0		1.55	0.41	0.87	0.02		2.52	0.25	0.06	0.00				148	0	
					54	14	30	1		89	9	2	0						
13W-23M035	70	5050	75	450	27	4	56	2	0	126	35	39	9.1	0.6	0.40	--	237	84	
1/04/68	--	--	8.3		1.35	0.33	2.43	0.05	0.00	2.06	0.73	1.10	0.15				235	0	
					32	8	58	1	0	51	18	27	4						
13W-32N025	70	5050	72	606	53	10	57	2	0	221	33	39	22.0	0.6	0.50	--	324	173	
1/04/68	--	--	8.1		2.64	0.82	2.48	0.05	0.00	3.62	0.69	1.10	0.35				326	0	
					44	14	41	1	0	63	12	19	6						
14W-11G015	70	5050	77	394	34	4	41	2	0	168	22	12	11.0	0.2	0.00	--	224	101	
1/04/68	--	--	8.3		1.70	0.33	1.78	0.05	0.00	2.75	0.46	0.34	0.18				209	0	
					44	8	46	1	0	74	12	9	5						
13W-20C025	15	5050	--	599	19	3	100	3	--	105	101	55	4.3	4.2	1.90	--	369	60	
1/29/67	--	--	8.0		0.95	0.25	4.35	0.08		1.72	2.10	1.55	0.07				343	0	
					17	4	77	1		32	39	28	1						
10/04/68	--	15	5050	--	633	21	3	95	3	0	105	101	55	4.5	4.2	2.50	--	358	65
						1.05	0.25	4.13	0.08	0.00	1.72	2.10	1.55	0.07				341	0
						19	4	75	1	0	32	39	28	1					
13W-23B025	15	5050	68	1460	171	33	87	3	0	192	389	124	13.0	0.6	0.20	--	975	563	
1/04/68	--	--	8.0		8.53	2.71	3.78	0.08	0.00	3.15	8.10	3.50	0.21				916	405	
					56	18	25	0	0	21	54	23	1						

TABLE E-1

MINERAL ANALYSES OF GROUND WATER

SOUTHERN CALIFORNIA

STATE WELL NO. DATE	COUNTY	LAB SAMPLER	TEMP PH	EC	MINERAL CONSTITUENTS IN				MILLIGRAMS PER LITER MILLIEQUIVALENTS PER LITER PERCENT REACTANCE VALUES				MILLIGRAMS PER LITER				TDS 180C (*105C) SUM
					CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SI02	
ANTELOPE HYDRO SUBUNIT					W26A0				W2600								
NORTH MUROC HYDRO SUBAREA					W26A6												
11N/08W-30F01S 06/03/68 --	15	5050	-- 8.3	1940	112 5.59 31	26 2.14 12	236 10.26 56	9 0.23 1	0 0.00 0	190 3.11 17	160 3.33 18	412 11.62 64	9.7 0.16 1	0.5	1.90	--	1120 1061
11N/09W-26R01S 06/03/68 --	15	5050	-- 8.2	1860	85 4.24 23	20 1.64 9	278 12.09 67	7 0.18 1	0 0.00 0	294 4.82 26	248 5.16 28	288 8.12 45	5.0 0.08 0	0.5	3.00	--	1070 1080
11N/09W-28K01S 11/30/67 1100	15	5050	-- 8.2	675	3 0.15 2	1 0.08 1	140 6.09 96	1 0.02 0	-- 3.05 47	84 1.75 27	59 1.66 26	1.8 0.03 0	0.7	0.23	--	405 383	
06/03/68 --	15	5050	-- 8.5	735	7 0.35 5	2 0.16 2	145 6.31 92	1 0.02 0	4 0.13 2	201 3.29 48	83 1.73 25	59 1.66 24	3.1 0.05 1	0.9	0.40	--	434 405
11N/09W-31C01S 06/03/68 --	15	5050	-- 8.4	1610	72 3.59 25	16 1.31 9	210 9.13 64	8 0.20 1	2 0.07 0	137 2.24 16	67 1.39 10	376 10.60 74	0.2 0.00 0	0.3	0.10	--	885 819
11N/09W-33F01S 11/30/67 1157	15	5050	-- 8.0	590	15 0.75 13	5 0.41 7	106 4.61 79	2 0.05 1	-- 3.28 57	72 1.50 26	32 0.90 16	3.8 0.06 1	1.4	0.14	--	380 336	
06/03/68 --	15	5050	-- 8.4	642	18 0.90 15	4 0.33 5	112 4.87 79	2 0.05 1	3 0.10 2	206 3.38 55	75 1.56 25	36 1.01 16	5.0 0.08 1	1.3	0.30	--	372 358
11N/09W-34K01S 11/30/67 1215	15	5050	-- 8.4	979	12 0.60 6	3 0.25 3	193 8.39 90	3 0.08 1	10 0.33 3	272 4.46 47	73 1.52 16	106 2.99 32	7.3 0.12 1	1.9	0.36	--	598 544
06/03/68 --	15	5050	-- 8.6	1060	15 0.75 7	3 0.25 2	210 9.13 89	3 0.08 1	12 0.40 4	300 4.92 49	72 1.50 15	108 3.04 30	8.2 0.13 1	1.9	0.60	--	620 582
32S/39E-33R01M 11/30/67 1250	15	5050	-- 8.2	944	41 2.04 21	8 0.66 7	154 6.70 70	5 0.13 1	-- 5.36 56	83 1.73 18	73 2.06 22	20.5 0.33 3	1.2	0.97	--	601 548	
06/03/68 --	15	5050	-- 8.3	1000	48 2.39 24	8 0.66 6	158 6.87 68	6 0.15 1	0 0.00 0	352 5.77 56	97 2.02 20	73 2.06 20	22.0 0.35 3	1.1	1.40	--	604 588
BUTTES HYDRO SUBAREA					W26A7												
05N/11W-09A02S 06/05/68 --	70	5050	-- 8.2	323	36 1.80 57	5 0.41 13	21 0.91 29	2 0.05 2	0 0.00 0	144 2.36 75	30 0.62 20	5 0.14 4	1.4 0.02 1	0.2	0.10	--	178 172
06N/11W-21N01S 11/30/67 1430	70	5050	-- 7.9	287	30 1.50 51	6 0.49 17	20 0.87 30	2 0.05 2	-- 2.29 79	140 0.39 14	19 0.17 6	6 0.04 1	2.3 0.04 1	0.2	0.00	--	180 155
06/05/68 --	70	5050	-- 8.3	300	33 1.65 52	6 0.49 16	22 0.96 30	2 0.05 2	0 0.00 0	143 2.34 78	19 0.39 13	7 0.20 7	3.1 0.05 2	0.2	0.10	--	181 163*
ROCK CREEK HYDRO SUBAREA					W26A8												
05N/09W-05F01S 09/18/68 --	70	1101	-- 7.8	509	28 1.40 29	5 0.41 8	69 3.00 62	1 0.02 0	0 0.00 0	117 1.92 38	124 2.58 51	18 0.51 10	0.8 0.01 0	1.0	--	0	363 305
06N/08W-32M01S 11/29/67 --	70	5050	-- 7.9	586	43 2.14 37	9 0.74 13	64 2.78 48	4 0.10 2	-- 1.44 25	88 4.14 72	199 0.14 2	5 0.02 0	1.5 0.02 0	0.6	0.00	--	394 370
06N/08W-35F02S 06/05/68 --	70	5050	76 8.3	505	24 1.20 26	6 0.49 11	64 2.78 61	3 0.08 2	0 0.00 0	93 1.52 33	141 2.93 64	4 0.11 2	2.1 0.03 1	0.4	0.10	--	291 291
EL MIRAGE HYDRO SUBUNIT					W28A0				MOJAVE HYDRO UNIT				W2800				
05N/09W-05F01S 09/18/68 --	70	1101	-- 7.8	509	28 1.40 29	5 0.41 8	69 3.00 62	1 0.02 0	0 0.00 0	117 1.92 38	124 2.58 51	18 0.51 10	0.8 0.01 0	1.0	--	0	363 305
06N/06W-18P01S 05/28/68 --	36	5050	-- 7.9	548	7 0.35 7	1 0.08 2	103 4.48 91	1 0.02 0	-- 1.57 30	96 3.46 66	166 0.22 4	8 0.00 0	0.0 0.00 0	0.8	0.06	--	387 335*
06N/07W-11R01S 03/18/68 --	36	5100	-- 8.6	529	5 0.25 5	0 0.00 0	110 4.78 95	1 0.02 0	14 0.47 9	103 1.69 32	140 2.91 56	5 0.14 3	0.0 0.00 0	1.5	0.11	--	325 328
05/28/68 --	36	5050	-- 7.9	536	3 0.15 3	0 0.00 0	101 4.39 97	0 0.00 0	-- 1.39 29	85 3.14 66	151 0.20 4	7 0.00 0	0.0 0.00 0	1.0	0.06	--	373 305

TABLE E-1
MINERAL ANALYSES OF GROUND WATER
SOUTHERN CALIFORNIA

WELL NO. DATE	COUNTY	LAB SAMPLER	TEMP PH	EC	MINERAL CONSTITUENTS IN				MILLIGRAMS PER LITER MILLIEQUIVALENTS PER LITER PERCENT REACTANCE VALUES				MILLIGRAMS PER LITER				TDS 180C (*105C) SUM	TH NCH
					CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SI02		
MOJAVE HYDRO SUBUNIT				W28A0	MOJAVE HYDRO UNIT				W2800									
07W-15C01S 28/68	36	5050	-- 8.1	527	44 2.19 42	8 0.66 13	51 2.22 43	4 0.10 2	--	90 1.47 27	180 3.75 68	9 0.25 5	1.0 0.02 0	0.7	0.00	--	331 342#	143 46
07W-17R01S 18/68	36	5100	-- 7.6	697	49 2.44 43	11 0.90 16	49 2.13 38	6 0.15 3	0	83 1.36 24	200 4.16 73	5 0.14 2	2.4 0.04 1	0.6	0.02	--	382 364	168 99
27/68	36	5050	68 7.7	532	46 2.29 43	11 0.90 17	47 2.04 38	5 0.13 2	--	87 1.42 26	176 3.66 68	10 0.28 5	2.0 0.03 1	0.5	0.00	--	353 341	160 89
26/68	36	5100	-- 7.1	534	50 2.49 44	11 0.90 16	48 2.09 37	6 0.15 3	0	85 1.39 25	190 3.95 70	10 0.28 5	1.6 0.02 0	0.5	0.04	--	334 359	170 100
R MOJAVE HYDRO SUBUNIT				W2880														
03W-10E01S 16/67 1030	33	5050	76 7.4	938	68 3.39 39	27 2.22 25	70 3.04 35	5 0.13 1	--	98 1.61 18	49 1.02 11	204 5.75 64	39.0 0.63 7	0.7	0.27	--	745 512	281 201
02W-30K15S 13/68	36	5050	-- 7.2	82	7 0.35 38	4 0.33 36	5 0.22 24	1 0.02 3	0	46 0.75 86	3 0.06 7	2 0.06 6	0.5 0.01 1	0.1	0.00	--	46 46	34 0
02W-32R02S 13/68	36	5100	-- 7.1	90	7 0.35 39	2 0.16 18	8 0.35 39	1 0.02 3	0	39 0.64 65	4 0.08 8	9 0.25 26	0.3 0.00 0	0.2	0.01	--	68 51#	26 0
03W-19P01S 05/68	36	5050	-- 6.6	132	13 0.65 51	2 0.16 13	10 0.43 34	1 0.02 2	0	46 0.75 60	2 0.04 3	16 0.45 36	0.2 0.00 0	0.0	0.00	--	86 67	41 3
03W-22D01S 05/68	36	5100	-- 7.3	134	16 0.80 57	2 0.16 12	9 0.39 28	2 0.05 4	0	61 1.00 75	2 0.04 3	10 0.28 21	0.5 0.01 1	0.3	0.00	--	67 72#	48 0
03W-26E01S 12/68	36	5050	-- 7.0	197	21 1.05 52	7 0.57 28	8 0.35 17	2 0.05 2	0	93 1.52 79	3 0.06 3	9 0.25 13	5.7 0.09 5	0.0	0.00	--	105 102	81 5
03W-27D01S 12/68	36	5050	-- 6.8	234	24 1.20 51	6 0.49 21	14 0.61 26	2 0.05 2	0	103 1.69 72	8 0.17 7	16 0.45 19	3.0 0.05 2	0.0	0.01	--	119 124	85 0
04W-04E01S 24/68	36	5050	-- 8.3	2120	122 6.09 31	28 2.30 12	252 10.96 56	7 0.18 1	0	134 2.20 11	237 4.93 25	446 12.58 64	2.5 0.04 0	0.5	1.00	--	1250 1162	420 310
04W-06R02S 05/68	36	5100	-- 6.4	233	20 1.00 47	6 0.49 23	15 0.65 30	1 0.02 1	0	95 1.56 71	2 0.04 2	12 0.34 15	16.0 0.26 12	0.1	0.00	--	67 119	75 0
04W-19A01S 05/68	36	5050	-- 6.2	122	9 0.45 42	3 0.25 23	8 0.35 32	1 0.02 2	0	37 0.61 57	5 0.10 10	7 0.20 18	10.0 0.16 15	0.0	0.01	--	54 62	35 4
04W-01C01S 27/68	36	5050	-- 7.9	181	17 0.85 46	4 0.33 18	14 0.61 33	2 0.05 3	0	79 1.29 76	11 0.23 13	6 0.17 10	1.2 0.02 1	0.5	0.00	--	115 95#	59 0
04W-28P01S 17/67 945	36	5050	61 7.5	248	18 0.90 35	7 0.57 22	25 1.09 42	1 0.02 1	--	116 1.90 75	12 0.25 10	13 0.37 15	0.0 0.00 0	0.4	0.05	--	138 134	74 0
04W-32D01S 17/67 900	36	5050	61 7.3	287	31 1.55 53	7 0.57 20	18 0.78 27	1 0.02 1	--	131 2.15 72	19 0.39 13	13 0.37 12	5.0 0.08 3	0.2	0.00	--	185 159	105 0
04W-32GS1S 22/68 1230	36	5050	-- 8.1	327	40 1.99 55	11 0.90 25	15 0.65 18	2 0.05 1	--	181 2.97 82	18 0.37 10	9 0.25 7	0.8 0.01 0	0.5	0.00	--	176 186	145 0
07W-09M01S 18/68	36	5100	-- 7.8	579	84 4.19 63	25 2.05 31	8 0.35 5	4 0.10 1	0	342 5.60 83	41 0.85 13	9 0.25 4	0.5 0.01 0	0.3	0.00	--	352 340	313 32
26/68	36	5050	-- 7.7	610	88 4.39 62	26 2.14 30	11 0.48 7	4 0.10 1	0	344 5.64 82	47 0.98 14	10 0.28 4	0.6 0.01 0	0.4	0.00	--	346 357	327 45
03W-01M01S 09/68	36	5100	-- 7.9	1824	124 6.19 35	28 2.30 13	211 9.18 52	5 0.13 1	0	90 1.47 8	302 6.29 35	356 10.04 56	3.8 0.06 0	0.5	1.06	--	1197 1076	425 351
02/68	36	5100	-- 7.8	1767	121 6.04 34	28 2.30 13	207 9.00 51	5 0.13 1	0	83 1.36 8	294 6.12 36	342 9.64 56	2.7 0.04 0	0.5	1.14	--	1152 1043	417 349

TABLE E-1

MINERAL ANALYSES OF GROUND WATER

SOUTHERN CALIFORNIA

STATE WELL NO. DATE	COUNTY	LAB SAMPLER	TEMP PH	EC	MINERAL CONSTITUENTS IN				MILLIGRAMS PER LITER MILLIEQUIVALENTS PER LITER PERCENT REACTANCE VALUES				MILLIGRAMS PER LITER				TDS 180C (*105C) SUM
					CA	MG	NA	K	CO3	HC03	S04	CL	NO3	F	B	SI02	
UPPER MOJAVE HYDRO SUBUNIT					MOJAVE HYORO UNIT				W2800								
04N/03W-06D025 01/09/68	36	5100	-- 8.1	493	58 2.89 58	12 0.99 20	24 1.04 21	2 0.05 1	0 0.00 0	178 2.92 60	14 0.29 6	13 0.37 7	80.0 1.29 26	0.2	0.00	--	317 291
07/02/68	36	5100	-- 7.8	439	50 2.49 58	10 0.82 19	21 0.91 21	2 0.05 1	0 0.00 0	146 2.39 54	24 0.50 11	16 0.45 10	66.0 1.06 24	0.3	0.00	--	283 262
04N/03W-09N025 04/02/68	36	5100	-- 7.7	160	15 0.75 45	5 0.41 25	11 0.48 29	1 0.02 1	0 0.00 0	83 1.36 87	3 0.06 4	5 0.14 9	0.0 0.00 0	0.3	0.16	--	143 82*
09/29/68	36	5050	-- 7.9	156	14 0.70 43	5 0.41 25	11 0.48 30	1 0.02 2	0 0.00 0	78 1.28 81	5 0.10 7	5 0.14 9	3.4 0.05 3	0.3	0.00	--	83 83
04N/03W-09N035 10/16/67	33	5050	78 7.4	988	69 3.44 37	22 1.81 20	88 3.83 42	4 0.10 1	-- 0.00 0	100 1.64 18	36 0.75 8	223 6.29 69	25.0 0.40 4	0.8	0.63	--	749 518
04N/03W-11C015 01/07/68	36	5100	-- 8.0	464	36 1.80 38	8 0.66 14	50 2.17 46	2 0.05 1	0 0.00 0	112 1.83 40	96 2.00 44	23 0.65 14	6.2 0.10 2	0.3	0.40	--	285 277
04N/03W-20L015 04/02/68	36	5100	-- 7.8	255	30 1.50 56	6 0.49 19	14 0.61 23	2 0.05 2	0 0.00 0	110 1.80 71	15 0.31 12	8 0.22 9	12.0 0.19 8	0.3	0.11	--	182 142
09/29/68	36	5050	-- 7.9	227	23 1.15 49	7 0.57 25	13 0.56 24	2 0.05 2	0 0.00 0	100 1.64 70	15 0.31 13	9 0.25 11	9.3 0.15 6	0.2	0.00	--	130 128
04N/04W-26C015 05/27/68	36	5050	-- 7.9	205	19 0.95 46	4 0.33 16	17 0.74 36	1 0.02 1	0 0.00 0	93 1.52 76	15 0.31 16	5 0.14 7	1.0 0.02 1	0.5	0.00	--	134 109
04N/04W-29F015 05/24/68	36	5050	67 8.3	217	20 1.00 46	2 0.16 8	22 0.96 45	1 0.02 1	0 0.00 0	101 1.65 77	3 0.06 3	8 0.22 11	12.0 0.19 9	0.2	0.00	--	138 118
04N/05W-03G015 05/20/68	36	5050	-- 8.3	540	42 2.09 42	8 0.66 13	49 2.13 43	4 0.10 2	0 0.00 0	94 1.54 31	155 3.23 64	6 0.17 3	6.5 0.10 2	0.3	0.00	--	337 317
04N/05W-05R015 05/20/68	36	5050	76 8.2	546	42 2.09 41	9 0.74 15	49 2.13 42	4 0.10 2	0 0.00 0	90 1.47 29	170 3.54 69	4 0.11 2	0.4 0.01 0	0.3	0.00	--	343 323
04N/06W-35C015 05/21/68	36	5050	67 7.8	718	105 5.24 63	30 2.47 30	10 0.43 5	4 0.10 1	-- 0.00 0	304 4.98 60	137 2.85 34	12 0.34 4	6.6 0.11 1	0.3	0.00	--	453 455
04N/07W-23L015 05/27/68	36	5050	-- 8.5	502	2 0.10 2	0 0.00 0	100 4.35 97	1 0.02 1	4 0.13 3	132 2.16 56	60 1.25 32	10 0.28 7	1.1 0.02 0	22.0	0.70	--	319 266*
04N/07W-24D015 03/18/68	36	5100	-- 7.9	824	123 6.14 63	36 2.96 30	11 0.48 5	5 0.13 1	0 0.00 0	354 5.80 60	166 3.46 36	9 0.25 3	7.5 0.12 1	0.4	0.00	--	575 532
09/26/68	36	5050	-- 7.7	797	117 5.84 65	31 2.55 28	12 0.52 6	5 0.13 1	0 0.00 0	325 5.33 57	157 3.27 35	18 0.51 5	9.8 0.16 2	0.4	0.15	--	524 511
05N/02W-09M015 05/22/68	36	5050	67 8.2	597	54 2.69 47	7 0.57 10	54 2.35 41	2 0.05 1	0 0.00 0	125 2.05 36	137 2.85 51	23 0.65 11	5.3 0.08 1	1.5	0.80	--	376 347
05N/03W-18Q015 09/29/68	36	5100	-- 7.8	981	61 3.04 32	12 0.99 10	124 5.39 57	3 0.08 1	0 0.00 0	85 1.39 14	194 4.04 42	149 4.20 43	2.8 0.04 0	1.3	1.92	--	600 591
05N/03W-24N015 04/02/68	36	5100	-- 7.7	1460	90 4.49 33	29 2.38 17	156 6.78 49	5 0.13 1	0 0.00 0	76 1.24 9	217 4.52 33	282 7.95 58	0.0 0.00 0	1.5	0.47	--	949 819
09/29/68	36	5050	-- 7.7	1459	94 4.69 33	28 2.30 16	160 6.96 49	5 0.13 1	0 0.00 0	98 1.61 11	221 4.60 32	282 7.95 56	0.0 0.00 0	1.6	0.48	--	896 841
05N/03W-25F015 04/02/68	36	5100	-- 7.8	1357	76 3.79 31	16 1.31 11	166 7.22 59	-- 0.00 0	0 0.00 0	85 1.39 11	198 4.12 33	250 7.05 56	5.3 0.08 1	1.3	0.18	--	818 755
05N/04W-08Q015 04/02/68	36	5100	-- 8.1	186	7 0.35 17	3 0.25 12	33 1.43 70	1 0.02 1	0 0.00 0	100 1.64 86	1 0.02 1	8 0.22 12	1.8 0.03 1	0.2	0.00	--	144 105*
05N/04W-09G025 04/02/68	36	5100	-- 8.5	192	8 0.40 19	2 0.16 8	34 1.48 71	1 0.02 1	2 0.07 3	98 1.61 85	2 0.04 2	5 0.14 7	2.1 0.03 2	0.2	0.01	--	144 105*

TABLE E-1

MINERAL ANALYSES OF GROUND WATER

SOUTHERN CALIFORNIA

WELL NO. DATE	COUNTY	LAB SAMPLER	TEMP PH	EC	MINERAL CONSTITUENTS IN										MILLIGRAMS PER LITER				TDS 180C (*105C) SUM	TH NCH
					MOJAVE HYDRO UNIT				W2800											
					CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SI02				
04W-09J015 02/68	36	5100	-- 9.0	201	4 0.20 9	1 0.08 4	41 1.78 85	1 0.02 1	10 0.33 15	95 1.56 72	3 0.06 3	6 0.17 8	1.5 0.02 1	0.3	0.00	--	123 115	14 0		
04W-09P015 02/68	36	5100	-- 8.4	191	10 0.50 25	2 0.16 8	30 1.30 65	2 0.05 2	2 0.07 4	95 1.56 84	3 0.06 3	5 0.14 8	1.0 0.02 1	0.3	0.00	--	150 102#	33 0		
04W-10N025 02/68	36	5100	-- 8.9	200	3 0.15 7	1 0.08 4	42 1.83 88	1 0.02 1	5 0.17 7	107 1.75 79	4 0.08 4	6 0.17 8	2.1 0.03 1	0.3	0.03	--	119 117#	12 0		
04W-11N015 16/68	36	5050	68 8.1	209	12 0.60 30	2 0.16 8	28 1.22 61	1 0.02 1	0 0.00 0	88 1.44 74	15 0.31 16	6 0.17 9	1.0 0.02 1	0.8	0.10	--	135 110	38 0		
04W-11P025 03/68	36	5100	-- 7.9	415	21 1.05 27	4 0.33 8	56 2.43 63	2 0.05 1	0 0.00 0	85 1.39 38	41 0.85 23	51 1.44 39	1.2 0.02 0	0.6	0.18	--	238 219	69 0		
04W-11P025 29/68	36	5100	-- 7.5	433	25 1.25 28	6 0.49 11	60 2.61 60	1 0.02 1	0 0.00 0	90 1.47 33	51 1.06 24	66 1.86 42	0.0 0.00 0	0.6	0.24	--	234 255	87 13		
04W-13N025 16/68	36	5050	69 8.0	956	93 4.64 50	20 1.64 18	65 2.83 31	3 0.08 1	0 0.00 0	215 3.52 38	146 3.04 32	92 2.59 28	13.0 0.21 2	0.4	0.20	--	593 539	314 138		
04W-14P015 16/68	36	5050	-- 8.3	178	9 0.45 25	1 0.08 5	28 1.22 69	1 0.02 1	0 0.00 0	85 1.39 82	8 0.17 10	4 0.11 7	1.2 0.02 1	0.5	0.00	--	114 95	27 0		
04W-19J015 02/68	36	5100	-- 8.3	207	11 0.55 25	2 0.16 7	33 1.43 65	2 0.05 2	2 0.07 3	103 1.69 79	6 0.12 6	7 0.20 9	3.4 0.05 3	0.3	0.00	--	119 118	36 0		
04W-20B015 02/68	36	5100	-- 8.2	198	10 0.50 23	2 0.16 8	33 1.43 67	2 0.05 2	0 0.00 0	107 1.75 90	0 0.00 0	6 0.17 9	1.6 0.02 1	0.2	0.01	--	123 108#	33 0		
04W-20M015 02/68	36	5100	-- 8.1	207	19 0.95 43	4 0.33 15	20 0.87 40	2 0.05 2	0 0.00 0	117 1.92 85	5 0.10 5	7 0.20 9	2.2 0.03 2	0.2	0.00	--	119 117	64 0		
04W-24A015 02/68	36	5100	-- 8.4	171	9 0.45 24	3 0.25 13	27 1.17 62	1 0.02 1	0 0.00 0	85 1.39 83	5 0.10 6	6 0.17 10	0.1 0.00 0	0.5	0.23	--	128 94#	35 0		
04W-24A015 29/68	36	5050	-- 8.1	173	8 0.40 21	4 0.33 17	27 1.17 61	1 0.02 1	0 0.00 0	83 1.36 74	9 0.19 10	10 0.28 15	0.7 0.01 1	0.8	0.08	--	90 102	36 0		
04W-24R015 02/68	36	5050	-- 8.4	233	9 0.45 19	3 0.25 10	38 1.65 69	2 0.05 2	2 0.07 3	95 1.56 69	4 0.08 4	12 0.34 15	12.0 0.19 9	0.3	0.00	--	145 129#	35 0		
04W-24X015 02/68	36	5100	-- 8.4	233	9 0.45 19	3 0.25 10	38 1.65 69	2 0.05 2	2 0.07 3	95 1.56 69	4 0.08 4	12 0.34 15	12.0 0.19 9	0.3	0.00	--	145 129#	35 0		
04W-36N025 27/68	36	5050	-- 7.9	206	20 1.00 49	4 0.33 16	16 0.69 34	1 0.02 1	0 0.00 0	84 1.38 69	13 0.27 14	6 0.17 8	11.0 0.18 9	0.3	0.00	--	131 113	66 0		
05W-058015 20/68	36	5050	-- 8.6	384	3 0.15 4	0 0.00 0	76 3.30 96	0 0.00 0	9 0.30 8	92 1.51 40	79 1.64 44	9 0.25 7	1.0 0.02 0	0.5	0.02	--	200 223#	7 0		
05W-22E025 18/68	36	5100	-- 7.9	430	31 1.55 38	4 0.33 8	49 2.13 52	3 0.08 2	0 0.00 0	63 1.03 24	146 3.04 72	4 0.11 3	1.6 0.02 1	0.4	0.00	--	298 270	94 42		
05W-22E025 26/68	36	5050	-- 7.6	425	32 1.60 37	4 0.33 8	52 2.26 53	3 0.08 2	0 0.00 0	68 1.11 27	141 2.93 70	4 0.11 3	1.2 0.02 0	0.4	0.00	--	273 271	96 41		
05W-22M025 20/68	36	5050	-- 7.5	511	6 0.30 6	2 0.16 3	106 4.61 91	0 0.00 0	-- 3.29 65	201 1.60 31	77 1.60 31	7 0.20 4	0.0 0.00 0	2.0	0.06	--	272 299	23 0		
06W-22G015 30/68	36	5050	-- 7.6	533	44 2.19 42	8 0.66 13	52 2.26 43	4 0.10 2	-- 1.56 29	95 3.46 64	166 3.46 64	11 0.31 6	4.0 0.06 1	0.4	0.00	--	344 337	143 65		
03W-09D015 03/68	36	5999	-- 8.5	790	5 0.25 3	1 0.08 1	156 6.78 94	3 0.08 1	5 0.17 2	83 1.36 20	206 4.29 64	30 0.85 13	1.1 0.02 0	14.4	0.97	--	501 464#	17 0		
03W-09D015 29/68	36	5050	-- 8.5	766	3 0.15 2	2 0.16 2	156 6.78 95	2 0.05 1	10 0.33 5	63 1.03 16	207 4.31 66	31 0.87 13	1.1 0.02 0	14.3	1.02	--	477 459#	16 0		

TABLE E-1

MINERAL ANALYSES OF GROUND WATER

SOUTHERN CALIFORNIA

STATE WELL NO. DATE	COUNTY	LAB TIME	TEMP SAMPLER PH	EC	MINERAL CONSTITUENTS IN				MILLIGRAMS PER LITER MILLIEQUIVALENTS PER LITER PERCENT REACTANCE VALUES				MILLIGRAMS PER LITER				TDS 180C (*105C) SUM
					CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SI02	
UPPER MOJAVE HYDRO SUBUNIT					MOJAVE HYDRO UNIT				W2800								
06N/03W-09E01S 04/03/68 --	36	5100	--	1870	49 2.44 13	9 0.74 4	364 15.83 83	4 0.10 0	10 0.33 2	212 3.47 19	487 10.14 56	129 3.64 20	31.0 0.50 3	11.0	1.73	--	1238 1200*
09/29/68 --	36	5050	--	1895	61 3.04 15	11 0.90 4	380 16.53 80	4 0.10 0	0 0.00 0	273 4.47 23	543 11.30 57	124 3.50 18	25.0 0.40 2	11.8	2.38	--	1295 1297
06N/03W-28R01S 04/03/68 --	36	5100	--	1338	104 5.19 37	23 1.89 14	154 6.70 48	3 0.08 0	0 0.00 0	93 1.52 11	444 9.24 68	98 2.76 20	0.8 0.01 0	1.2	0.45	--	937 875
09/29/68 --	36	5050	--	1262	104 5.19 38	22 1.81 13	150 6.52 48	3 0.08 1	0 0.00 0	95 1.56 12	439 9.14 68	98 2.76 20	0.6 0.01 0	1.2	0.53	--	919 865
06N/03W-32R01S 04/03/68 --	36	5100	--	948	90 4.49 49	17 1.40 15	75 3.26 35	3 0.08 1	0 0.00 0	122 2.00 22	137 2.85 32	123 3.47 38	43.0 0.69 8	0.8	0.20	--	602 549
09/29/68 --	36	5100	--	923	92 4.59 50	15 1.23 13	76 3.30 36	3 0.08 1	0 0.00 0	127 2.08 23	138 2.87 32	119 3.35 37	43.0 0.69 8	0.7	0.19	--	579 550
06N/04W-29M01S 05/17/68 --	36	5050	--	896	93 4.64 49	19 1.56 16	74 3.22 34	2 0.05 0	-- 3.62 38	221 4.29 45	206 4.29 17	57 1.61 17	0.0 0.00 0	0.7	0.14	--	595 561
06N/04W-29M02S 05/17/68 --	36	5050	--	1054	108 5.39 47	22 1.81 16	94 4.09 36	2 0.05 0	-- 4.29 38	262 5.25 47	252 5.25 47	57 1.61 14	2.5 0.04 0	0.6	0.15	--	660 668
06N/04W-29N03S 05/17/68 --	36	5050	--	459	41 2.04 44	8 0.66 14	45 1.96 42	1 0.02 0	-- 3.11 65	190 0.79 17	38 0.82 17	29 0.82 17	2.3 0.04 1	0.5	0.00	--	291 259
06N/04W-29N04S 05/17/68 --	36	5050	--	513	46 2.29 43	10 0.82 15	50 2.17 41	1 0.02 0	-- 3.28 61	200 1.04 19	50 0.99 18	35 0.99 18	2.0 0.03 1	0.4	0.04	--	336 293
06N/04W-32N04S 05/17/68 --	36	5050	75	194	7 0.35 20	1 0.08 5	28 1.22 72	2 0.05 3	-- 1.39 71	85 0.00 0	0 0.53 27	19 0.53 27	1.2 0.02 1	0.5	0.00	--	113 101*
06N/05W-02O02S 05/16/68 --	36	5050	70	464	20 1.00 69	1 0.08 6	7 0.30 21	2 0.05 4	0 0.00 0	88 1.44 35	125 2.60 62	3 0.08 2	2.0 0.03 1	0.4	0.00	--	283 204*
06N/05W-08F01S 03/18/68 --	36	5100	--	454	7 0.35 8	2 0.16 4	90 3.91 88	1 0.02 1	0 0.00 0	120 1.97 44	113 2.35 52	5 0.14 3	1.9 0.03 1	0.6	0.09	--	305 280
09/26/68 --	36	5100	--	421	5 0.25 6	4 0.33 7	89 3.87 86	1 0.02 1	0 0.00 0	129 2.11 48	104 2.16 49	3 0.08 2	2.1 0.03 1	0.5	0.15	--	243 273
06N/05W-08F02S 05/20/68 --	36	5050	68	450	5 0.25 6	1 0.08 2	85 3.70 91	1 0.02 1	1 0.03 1	115 1.88 47	98 2.04 50	3 0.08 2	0.0 0.00 0	0.5	0.10	--	262 252
06N/05W-08F03S 05/20/68 --	36	5050	--	468	7 0.35 8	2 0.16 4	84 3.65 87	1 0.02 1	0 0.00 0	116 1.90 44	108 2.25 52	3 0.08 2	2.8 0.04 1	0.5	0.00	--	290 266
06N/05W-28E01S 03/18/68 --	36	5100	--	469	40 1.99 42	8 0.66 14	47 2.04 43	2 0.05 1	0 0.00 0	186 3.05 62	49 1.02 21	28 0.79 16	1.3 0.02 0	0.6	0.04	--	276 268
09/26/68 --	36	5050	--	481	43 2.14 42	7 0.57 11	53 2.30 45	3 0.08 1	0 0.00 0	190 3.11 63	50 1.04 21	28 0.79 16	0.2 0.00 0	0.5	0.04	--	243 279
06N/05W-29J02S 03/18/68 --	36	5100	--	463	46 2.29 47	6 0.49 10	46 2 41	2 0.05 1	0 0.00 0	195 3.20 64	51 1.06 21	25 0.70 14	0.2 0.00 0	0.5	0.06	--	300 273
09/26/68 --	36	5050	--	487	46 2.29 44	7 0.57 11	53 2.30 44	3 0.08 1	0 0.00 0	193 3.16 63	52 1.08 21	28 0.79 16	0.5 0.01 0	0.5	0.10	--	257 285
06N/07W-11R01S 03/18/68 --	36	5050	--	529	5 0.25 5	0 0.00 0	110 4.78 95	1 0.02 0	14 0.47 9	103 1.69 32	140 2.91 56	5 0.14 3	0.0 0.00 0	1.5	0.11	--	325 328
09/26/68 --	36	5050	--	491	0 0.00 0	3 0.25 5	107 4.65 94	1 0.02 0	12 0.40 8	76 1.24 25	150 3.12 64	5 0.14 3	0.1 0.00 0	1.1	0.08	--	308 317
07N/04W-07C01S 02/13/68 --	36	5100	--	892	77 3.84 41	18 1.48 16	90 3.91 42	2 0.05 0	0 0.00 0	288 4.72 51	150 3.12 34	51 1.44 15	0.0 0.00 0	1.5	0.22	--	539 532

TABLE E-1

MINERAL ANALYSES OF GROUND WATER

SOUTHERN CALIFORNIA

WELL NO. DATE	COUNTY	LAB SAMPLER	TEMP PH	EC	MINERAL CONSTITUENTS IN								MILLIGRAMS PER LITER				TDS 180C (*105C) SUM	TH NCH				
					MOJAVE HYDRO UNIT				W2800				MILLIEQUIVALENTS PER LITER						PERCENT REACTANCE VALUES			
					CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SiO2						
ER MOJAVE HYDRO SUBUNIT					W2800																	
04W-07C02S	36	5100	--	920	83	17	101	3	0	261	189	61	0.8	0.8	0.18	--	623	277				
05/68	--	--	7.1		4.14	1.40	4.39	0.08	0.00	4.28	3.93	1.72	0.01				585	63				
					41	14	44	1	0	43	40	17	0									
04W-31N01S	36	5100	--	569	22	2	102	2	5	200	73	30	0.4	1.0	0.29	--	379	63				
03/68	--	--	8.3		1.10	0.16	4.44	0.05	0.17	3.28	1.52	0.85	0.01				336	0				
					19	3	77	1	3	56	26	14	0									
05W-24N01S	36	5050	71	1068	91	15	123	3	--	167	323	57	4.5	0.7	0.30	--	675	289				
16/68	--	--	7.2		4.54	1.23	5.35	0.08		2.74	6.72	1.61	0.07				700	144				
					40	11	48	1		25	60	14	1									
OLE MOJAVE HYDRO SUBUNIT					W2800																	
03W-04K01S	36	5050	--	1050	74	13	114	3	0	184	181	111	3.2	1.2	0.40	--	667	238				
21/68	--	--	8.3		3.69	1.07	4.96	0.08	0.00	3.01	3.77	3.13	0.05				592	87				
					38	11	51	1	0	30	38	31	0									
04W-12P01S	36	5100	--	1522	176	20	133	4	0	454	195	169	22.0	0.7	0.19	--	982	522				
13/68	--	--	7.7		8.78	1.64	5.78	0.10	0.00	7.44	4.06	4.76	0.35				944	149				
					54	10	35	1	0	45	24	29	2									
05/68	--	--	7.1	1544	185	28	140	4	0	505	209	165	21.0	0.7	0.25	--	1041	577				
					9.23	2.30	6.09	0.10	0.00	8.28	4.35	4.65	0.34				1002	163				
					52	13	34	1	0	47	25	26	2									
04W-20A01S	36	5100	--	4239	239	45	702	5	0	456	800	745	11.0	0.9	1.85	--	2867	782				
13/68	--	--	8.0		11.93	3.70	30.54	0.13	0.00	7.47	16.66	21.01	0.18				2774	408				
					26	8	66	0	0	16	37	46	0									
05/68	--	--	7.9	3116	165	27	525	4	0	290	598	540	14.0	2.2	1.24	--	2107	523				
					8.23	2.22	22.84	0.10	0.00	4.75	12.45	15.23	0.22				2019	285				
					25	7	68	0	0	14	38	47	1									
04W-21C01S	36	5100	--	1691	186	30	163	3	0	203	529	147	0.5	0.8	0.22	--	1240	588				
05/68	--	--	7.7		9.28	2.47	7.09	0.08	0.00	3.33	11.01	4.14	0.01				1160	421				
					49	13	37	0	0	18	59	22	0									
04W-31R01S	36	5100	--	1645	135	22	238	3	0	420	385	111	4.4	1.7	0.55	--	1110	428				
13/68	--	--	7.7		6.74	1.81	10.35	0.08	0.00	6.88	8.01	3.13	0.07				1108	83				
					35	9	55	0	0	38	44	17	0									
05/68	--	--	7.8	1768	149	23	250	3	0	481	411	128	0.1	0.6	0.37	--	1225	467				
					7.43	1.89	10.87	0.08	0.00	7.88	8.56	3.61	0.00				1202	72				
					37	9	54	0	0	39	43	18	0									
04W-32M02S	36	5050	68	2550	229	37	309	6	0	432	782	165	3.8	0.4	0.70	--	1830	724				
16/68	--	--	8.0		11.43	3.04	13.44	0.15	0.00	7.08	16.28	4.65	0.06				1746	370				
					41	11	48	0	0	25	58	17	0									
02W-01F02S	36	5100	--	611	51	9	67	2	0	195	81	40	5.7	0.7	0.17	--	381	164				
13/68	--	--	7.7		2.54	0.74	2.91	0.05	0.00	3.20	1.69	1.13	0.09				353	4				
					41	12	47	1	0	52	28	18	1									
05/68	--	--	7.9	717	61	10	82	3	0	203	105	56	15.0	0.8	0.31	--	434	193				
					3.04	0.82	3.57	0.08	0.00	3.33	2.19	1.58	0.24				433	27				
					40	11	47	1	0	45	30	21	3									
02W-06R01S	36	5100	--	358	32	6	33	3	0	137	33	20	3.1	0.6	0.04	--	224	105				
13/68	--	--	7.9		1.60	0.49	1.43	0.08	0.00	2.24	0.69	0.56	0.05				199	0				
					44	14	40	2	0	63	19	16	1									
05/68	--	--	7.9	357	34	6	33	2	0	142	29	23	3.3	0.6	0.08	--	206	110				
					1.70	0.49	1.43	0.05	0.00	2.33	0.60	0.65	0.05				201	0				
					46	13	39	1	0	64	17	18	1									
02W-17E01S	36	5100	--	742	35	7	124	3	0	200	134	57	4.2	3.6	1.02	--	516	116				
05/68	--	--	8.1		1.75	0.57	5.39	0.08	0.00	3.28	2.79	1.61	0.07				468	0				
					22	7	69	1	0	42	36	21	1									
02W-24J01S	36	5100	--	602	36	7	82	3	0	205	74	39	0.5	2.8	0.33	--	371	119				
13/68	--	--	8.0		1.80	0.57	3.57	0.08	0.00	3.36	1.54	1.10	0.01				346	0				
					30	10	59	1	0	56	26	18	0									
03W-01J01S	36	5100	--	620	61	14	56	3	0	254	68	31	6.2	0.6	0.15	--	383	210				
13/68	--	--	8.1		3.04	1.15	2.43	0.08	0.00	4.16	1.41	0.87	0.10				365	2				
					45	17	36	1	0	63	22	13	1									
05/68	--	--	8.2	670	75	12	58	3	0	278	76	43	6.8	0.5	0.18	--	416	237				
					3.74	0.99	2.52	0.08	0.00	4.56	1.58	1.21	0.11				412	9				
					51	13	34	1	0	61	21	16	1									
03W-03A02S	36	5100	--	603	48	10	65	2	0	207	66	48	1.4	0.7	0.14	--	351	161				
13/68	--	--	7.9		2.39	0.82	2.83	0.05	0.00	3.39	1.37	1.35	0.02				343	0				
					39	13	46	1	0	55	22	22	0									
05/68	--	--	8.3	554	51	8	68	2	0	203	68	48	1.4	0.7	0.15	--	327	160				
					2.54	0.66	2.96	0.05	0.00	3.33	1.41	1.35	0.02				348	0				
					41	11	48	1	0	54	23	22	0									

TABLE E-1
MINERAL ANALYSES OF GROUND WATER
SOUTHERN CALIFORNIA

STATE WELL NO. DATE	COUNTY	LAB SAMPLER	TEMP PH	EC	MINERAL CONSTITUENTS IN										MILLIGRAMS PER LITER					TO5 180C (*105C) SUM	
					MOJAVE HYDRO UNIT										W2800						
					CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SI02					
MIDDLE MOJAVE HYDRO SUBUNIT					W28C0																
09N/03W-24J01S 09/05/68 --	36	5100	--	598	37	6	84	3	0	203	72	41	0.7	1.8	0.29	--	383				
		--	7.6		1.85	0.49	3.65	0.08	0.00	3.33	1.50	1.16	0.01				346				
					30	8	60	1	0	55	25	19	0								
09N/03W-26H01S 02/13/68 --	36	5100	--	694	17	6	121	3	5	164	122	44	6.7	2.1	0.65	--	422				
		--	8.3		0.85	0.49	5.26	0.08	0.17	2.69	2.54	1.24	0.11				409				
					13	7	79	1	2	40	38	18	2								
09/05/68 --	36	5100	--	651	16	7	126	3	0	168	124	43	6.3	1.7	0.70	--	385				
		--	8.0		0.80	0.57	5.48	0.08	0.00	2.75	2.58	1.21	0.10				411				
					11	8	79	1	0	41	39	18	1								
09N/03W-28A01S 02/13/68 --	36	5100	--	792	57	10	95	2	0	173	153	62	11.0	0.8	0.25	--	494				
		--	8.0		2.84	0.82	4.13	0.05	0.00	2.83	3.18	1.75	0.18				477				
					36	10	53	1	0	36	40	22	2								
09N/03W-28A02S 09/05/68 --	36	5050	--	1075	92	16	133	2	0	244	228	96	4.1	0.7	0.31	--	724				
		--	8.0		4.59	1.31	5.78	0.05	0.00	4.00	4.75	2.71	0.07				693				
					39	11	49	0	0	35	41	23	1								
10N/02W-30O01S 02/13/68 --	36	5100	--	394	33	7	41	2	0	168	33	22	1.2	0.6	0.09	--	247				
		--	8.1		1.65	0.57	1.78	0.05	0.00	2.75	0.69	0.62	0.02				223				
					41	14	44	1	0	67	17	15	0								
09/05/68 --	36	5100	--	387	35	6	42	2	0	166	28	23	0.9	0.6	0.08	--	246				
		--	7.9		1.75	0.49	1.83	0.05	0.00	2.72	0.58	0.65	0.01				220				
					42	12	44	1	0	69	15	16	0								
10N/02W-36N07S 05/21/68 --	36	5050	--	632	59	13	55	3	--	215	86	41	8.6	0.4	0.10	--	377				
		--	7.5		2.94	1.07	2.39	0.08		3.52	1.79	1.16	0.14				372				
					45	16	37	1		53	27	17	2								
10N/03W-27O01S 02/13/68 --	36	5100	--	776	60	11	89	2	0	181	134	76	3.1	0.7	0.38	--	494				
		--	8.2		2.99	0.90	3.87	0.05	0.00	2.97	2.79	2.14	0.05				466				
					38	12	49	1	0	37	35	27	1								
09/05/68 --	36	5100	--	774	59	11	94	2	0	176	132	77	2.9	0.6	0.39	--	479				
		--	8.1		2.94	0.90	4.09	0.05	0.00	2.88	2.75	2.17	0.05				466				
					37	11	51	1	0	37	35	28	1								
10N/03W-27O03S 05/21/68 --	36	5050	--	1110	75	15	123	3	0	153	201	130	6.3	0.6	0.60	--	685				
		--	8.3		3.74	1.23	5.35	0.08	0.00	2.51	4.18	3.67	0.10				630				
					36	12	51	1	0	24	40	35	1								
10N/03W-35C03S 02/13/68 --	36	5100	--	400	25	6	50	2	0	132	29	39	0.0	0.8	0.15	--	263				
		--	8.2		1.25	0.49	2.17	0.05	0.00	2.16	0.60	1.10	0.00				217				
					31	12	55	1	0	56	16	28	0								
10N/03W-35E01S 09/05/68 --	36	5050	--	389	26	6	51	2	0	132	29	40	0.0	0.7	0.14	--	259				
		--	8.0		1.30	0.49	2.22	0.05	0.00	2.16	0.60	1.13	0.00				220				
					32	12	55	1	0	55	15	29	0								
10N/03W-36H02S 05/28/68 --	36	5050	--	566	51	12	46	3	--	167	60	55	5.5	0.5	0.07	--	324				
		--	7.6		2.54	0.99	2	0.08		2.74	1.25	1.55	0.09				316				
					45	18	36	1		49	22	28	2								
10N/03W-36J02S 02/13/68 --	36	5100	--	801	85	17	59	3	0	181	145	77	5.0	0.6	0.23	--	500				
		--	8.0		4.24	1.40	2.57	0.08	0.00	2.97	3.02	2.17	0.08				481				
					51	17	31	1	0	36	37	26	1								
09/05/68 --	36	5100	--	565	59	10	48	2	0	159	83	50	4.3	0.5	0.13	--	328				
		--	8.0		2.94	0.82	2.09	0.05	0.00	2.61	1.73	1.41	0.07				336				
					50	14	35	1	0	45	30	24	1								
HARPER HYDRO SUBUNIT					W28D0																
HARPER HYDRO SUBAREA					W28D2																
11N/03W-28R02S 05/22/68 --	36	5050	--	501	18	3	81	1	0	180	41	31	0.1	1.5	0.30	--	298				
		--	8.3		0.90	0.25	3.52	0.02	0.00	2.95	0.85	0.87	0.00				266				
					19	5	75	0	0	63	18	19	0								
11N/04W-28N02S 05/29/68 --	36	5050	69	1420	40	7	232	5	0	164	240	187	6.2	0.9	1.40	--	901				
		--	8.3		1.99	0.57	10.09	0.13	0.00	2.69	5.00	5.27	0.10				801				
					16	4	79	1	0	21	38	40	1								
11N/05W-24G01S 05/29/68 --	36	5050	70	2160	35	5	390	5	0	208	207	404	16.0	1.2	1.30	--	1250				
		--	8.2		1.75	0.41	16.96	0.13	0.00	3.41	4.31	11.39	0.26				1167				
					9	2	88	1	0	18	22	59	1								
32S/43E-28O01M 12/07/67 --	36	5100	--	1164	40	7	200	5	0	124	304	97	0.0	2.5	2.43	--	710				
		--	7.4		1.99	0.57	8.70	0.13	0.00	2.03	6.33	2.73	0.00				719				
					17	5	76	1	0	18	57	25	0								
LOWER MOJAVE HYDRO SUBUNIT					W28E0																
09N/01E-01L01S 02/15/68 --	36	5100	--	494	45	7	54	2	0	200	42	30	4.6	0.6	0.14	--	285				
		--	8.1		2.24	0.57	2.35	0.05	0.00	3.28	0.87	0.85	0.07				284				
					43	11	45	1	0	65	17	17	1								
08/19/68 --	36	5100	--	486	47	7	52	2	0	198	40	32	4.3	0.5	0.12	--	318				
		--	7.2		2.34	0.57	2.26	0.05	0.00	3.24	0.83	0.90	0.07				283				
					45	11	43	1	0	64	16	18	1								

TABLE E-1
MINERAL ANALYSES OF GROUND WATER
SOUTHERN CALIFORNIA

SITE DATE	WELL NO. TIME	COUNTY	LAB SAMPLER	TEMP PH	EC	MINERAL CONSTITUENTS IN										MILLIGRAMS PER LITER					TDS 180C (*105C) SUM	TH NCH
						MOJAVE HYDRO UNIT				W2800						MILLIEQUIVALENTS PER LITER PERCENT REACTANCE VALUES						
						CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SI02					
09/01E-01L04S	36	5100	--	--	475	44	8	55	2	0	200	42	31	4.8	0.6	0.15	--	281	143			
01/15/68	--	--	8.1			2.19	0.66	2.39	0.05	0.00	3.28	0.87	0.87	0.08				286	0			
						41	12	45	1	0	64	17	17	1								
09/19/68	36	5100	--	--	489	46	7	52	2	0	193	41	32	4.8	0.6	0.15	--	342	144			
			7.1			2.29	0.57	2.26	0.05	0.00	3.16	0.85	0.90	0.08				281	0			
						44	11	44	1	0	63	17	18	1								
09/01E-13E01S	36	5100	--	--	872	75	17	102	3	0	293	127	71	16.0	0.6	0.63	--	554	257			
01/14/68	--	--	8.3			3.74	1.40	4.44	0.08	0.00	4.80	2.64	2.00	0.26				557	17			
						39	14	46	1	0	49	27	21	3								
09/19/68	36	5100	--	--	662	52	11	78	3	0	205	96	50	4.6	0.7	0.43	--	446	175			
			7.5			2.59	0.90	3.39	0.08	0.00	3.36	2.00	1.41	0.07				397	7			
						37	13	49	1	0	49	29	21	1								
09/01E-13E02S	36	5100	--	--	1009	91	17	107	4	0	325	138	81	20.0	0.3	0.60	--	645	297			
01/14/68	--	--	7.9			4.54	1.40	4.65	0.10	0.00	5.33	2.87	2.28	0.32				619	31			
						42	13	43	1	0	49	27	21	3								
09/19/68	36	5100	--	--	987	90	15	103	4	0	303	135	78	22.0	0.6	0.60	--	653	286			
			7.2			4.49	1.23	4.48	0.10	0.00	4.97	2.81	2.20	0.35				598	38			
						44	12	43	1	0	48	27	21	3								
09/01E-15N01S	36	5050	--	--	536	46	8	53	2	--	207	41	36	5.0	0.1	0.05	--	322	148			
01/10/68	--	--	7.3			2.29	0.66	2.30	0.05		3.39	0.85	1.01	0.08				293	0			
						43	12	43	1		63	16	19	1								
09/01E-15N02S	36	5100	--	--	1173	100	19	130	4	0	381	163	104	5.2	0.5	0.71	--	690	328			
01/14/68	--	--	8.0			4.99	1.56	5.65	0.10	0.00	6.24	3.39	2.93	0.08				714	15			
						40	13	46	1	0	49	27	23	1								
01/10/68	36	5050	--	--	1175	98	17	139	3	--	359	187	104	5.2	0.6	0.67	--	719	315			
			7.4			4.89	1.40	6.05	0.08		5.88	3.89	2.93	0.08				731	20			
						39	11	49	1		46	30	23	1								
09/19/68	36	5100	--	--	1152	101	17	133	3	0	354	161	112	1.0	0.5	0.67	--	750	322			
			6.7			5.04	1.40	5.78	0.08	0.00	5.80	3.35	3.16	0.02				704	32			
						41	11	47	1	0	47	27	26	0								
09/01E-18M02S	36	5050	73	--	879	76	11	86	3	4	239	95	80	2.3	0.4	0.30	--	535	235			
01/23/68	--	--	8.4			3.79	0.90	3.74	0.08	0.13	3.92	1.98	2.26	0.04				476	32			
						44	11	44	1	2	47	24	27	0								
09/02E-08F01S	36	5100	--	--	355	29	6	39	1	0	151	28	16	2.5	0.7	0.11	--	251	97			
01/19/68	--	--	7.4			1.45	0.49	1.70	0.02	0.00	2.47	0.58	0.45	0.04				197	0			
						39	13	46	1	0	70	16	13	1								
09/02E-08N02S	36	5100	--	--	352	26	7	39	1	0	154	26	15	2.6	0.7	0.09	--	212	94			
01/14/68	--	--	8.2			1.30	0.57	1.70	0.02	0.00	2.52	0.54	0.42	0.04				194	0			
						36	16	47	1	0	71	15	12	1								
01/10/68	36	5050	--	--	354	27	5	39	1	--	151	27	10	2.8	0.7	0.00	--	235	88			
			7.9			1.35	0.41	1.70	0.02		2.47	0.56	0.28	0.04				187	0			
						39	12	49	1		74	17	8	1								
09/02E-18E01S	36	5100	--	--	868	84	16	90	3	0	312	120	55	14.0	0.5	0.24	--	518	276			
01/14/68	--	--	8.2			4.19	1.31	3.91	0.08	0.00	5.11	2.50	1.55	0.22				537	20			
						44	14	41	1	0	54	27	16	2								
01/10/68	36	5050	68	--	647	57	11	61	3	--	209	79	41	10.5	0.6	0.17	--	388	188			
			7.5			2.84	0.90	2.65	0.08		3.42	1.64	1.16	0.17				366	16			
						44	14	41	1		54	26	18	3								
01/19/68	36	5100	--	--	630	62	9	62	3	0	205	80	42	11.0	0.6	0.19	--	418	192			
			6.9			3.09	0.74	2.70	0.08	0.00	3.36	1.66	1.18	0.18				371	24			
						47	11	41	1	0	53	26	18	3								
01/02E-30J01S	36	5050	73	--	618	40	7	68	3	0	143	70	60	3.1	0.6	1.60	--	396	129			
01/24/68	--	--	8.2			1.99	0.57	2.96	0.08	0.00	2.34	1.46	1.69	0.05				324	11			
						36	10	53	1	0	42	26	30	1								
01/02E-31R01S	36	5100	--	--	623	27	10	95	2	0	159	98	53	1.8	0.7	0.92	--	365	109			
01/14/68	--	--	8.2			1.35	0.82	4.13	0.05	0.00	2.61	2.04	1.49	0.03				367	0			
						21	13	65	1	0	42	33	24	0								
01/10/68	36	5050	--	--	463	32	5	56	1	--	170	41	30	1.5	0.7	0.16	--	288	100			
			8.0			1.60	0.41	2.43	0.02		2.79	0.85	0.85	0.02				251	0			
						36	9	54	1		62	19	19	0								
01/19/68	36	5100	--	--	613	34	6	87	2	0	156	94	55	1.6	0.8	0.90	--	416	110			
			7.7			1.70	0.49	3.78	0.05	0.00	2.56	1.96	1.55	0.02				358	0			
						28	8	63	1	0	42	32	25	0								
01/02E-32R01S	36	5050	--	--	486	38	5	54	1	3	190	34	26	2.0	0.5	0.20	--	277	115			
01/23/68	--	--	8.5			1.90	0.41	2.35	0.02	0.10	3.11	0.71	0.73	0.03				258	0			
						40	9	50	0	2	66	15	16	1								
01/03E-36N01S	36	5050	--	--	409	28	2	52	1	0	156	26	24	2.6	0.4	0.20	--	233	78			
01/23/68	--	--	8.3			1.40	0.16	2.26	0.02	0.00	2.56	0.54	0.68	0.04				213	0			
						36	4	59	1	0	67	14	18	1								

TABLE E-1

MINERAL ANALYSES OF GROUND WATER

SOUTHERN CALIFORNIA

STATE DATE	WELL NO. TIME	COUNTY	LAB SAMPLER	TEMP PH	EC	MINERAL CONSTITUENTS IN				MILLIGRAMS PER LITER MILLIEQUIVALENTS PER LITER PERCENT REACTANCE VALUES				MILLIGRAMS PER LITER				TDS 180C (*105C) SUM
						CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SI02	
LOWER MOJAVE HYDRO SUBUNIT						MOJAVE HYDRO UNIT						W2800						
W28E0																		
09N/01W-04G01S	36	5050	--	664	58	11	64	3	--	220	96	36	2.5	0.6	0.12	--	411	
06/11/68	--	--	7.9		2.89	0.90	2.78	0.08		3.60	2.00	1.01	0.04				380	
					43	14	42	1		54	30	15	1					
09N/01W-09D02S	36	5050	--	2794	171	31	420	5	--	289	690	347	55.0	1.8	3.70	--	1938	
06/10/68	--	--	7.6		8.53	2.55	18.27	0.13		4.74	14.36	9.78	0.89				1867	
					29	9	62	0		16	48	33	3					
09N/01W-10D01S	36	5050	--	681	60	10	65	3	0	218	96	37	2.4	0.5	0.10	--	387	
05/23/68	--	--	8.1		2.99	0.82	2.83	0.08	0.00	3.57	2.00	1.04	0.04				382	
					44	12	42	1	0	54	30	16	1					
09N/01W-10D02S	36	5100	--	717	68	11	70	3	0	244	111	44	1.6	0.6	0.14	--	447	
02/15/68	--	--	8.0		3.39	0.90	3.04	0.08	0.00	4.00	2.31	1.24	0.02				430	
					46	12	41	1	0	53	30	16	0					
06/11/68	--	36	5050	--	688	62	12	66	3	--	231	101	39	1.7	0.6	0.13	--	428
					3.09	0.99	2.87	0.08		3.79	2.10	1.10	0.03				399	
					44	14	41	1		54	30	16	0					
08/19/68	--	36	5100	--	619	60	11	64	3	0	232	91	39	1.5	0.5	0.17	--	424
					2.99	0.90	2.78	0.08	0.00	3.80	1.89	1.10	0.02				385	
					44	13	41	1	0	56	28	16	0					
09N/01W-10G01S	36	5100	--	1918	110	20	333	4	0	591	363	137	16.0	1.4	0.61	--	1261	
02/15/68	--	--	8.1		5.49	1.64	14.48	0.10	0.00	9.69	7.56	3.86	0.26				1276	
					25	8	67	0	0	45	35	18	1					
08/19/68	--	36	5100	--	1813	106	18	321	4	0	554	367	140	17.0	2.0	0.58	--	1309
					5.29	1.48	13.96	0.10	0.00	9.08	7.64	3.95	0.27				1248	
					25	7	67	0	0	43	36	19	1					
09N/01W-13H02S	36	5050	67	830	56	12	105	3	--	223	130	67	3.3	0.7	0.41	--	460	
06/10/68	--	--	8.1		2.79	0.99	4.57	0.08		3.65	2.71	1.89	0.05				488	
					33	12	54	1		44	33	23	1					
09N/02W-17E01S	36	5100	--	769	30	8	123	3	0	198	130	53	3.9	4.8	0.48	--	496	
02/13/68	--	--	8.0		1.50	0.66	5.35	0.08	0.00	3.24	2.71	1.49	0.06				454	
					20	9	71	1	0	43	36	20	1					
10N/01W-32F10S	36	5050	--	985	93	19	84	3	0	250	212	47	4.9	0.6	0.10	--	659	
05/23/68	--	--	8.2		4.64	1.56	3.65	0.08	0.00	4.10	4.41	1.32	0.08				587	
					47	16	37	1	0	41	44	13	1					
10N/01W-32J01S	36	5100	--	960	96	16	100	4	0	242	235	54	2.7	0.6	0.15	--	638	
02/15/68	--	--	8.0		4.79	1.31	4.35	0.10	0.00	3.97	4.89	1.52	0.04				628	
					45	12	41	1	0	38	47	15	0					
08/19/68	--	36	5100	--	876	90	14	86	3	0	247	187	52	3.3	0.6	0.16	--	627
					4.49	1.15	3.74	0.08	0.00	4.05	3.89	1.47	0.05				558	
					47	12	39	1	0	43	41	15	1					
10N/01W-33E01S	36	5050	--	1649	175	32	158	5	--	366	441	104	5.0	0.6	0.26	--	1181	
06/11/68	--	--	7.5		8.73	2.63	6.87	0.13		6.00	9.18	2.93	0.08				1101	
					47	14	37	1		33	50	16	0					
10N/04W-29O01S	36	5050	--	1920	91	5	276	6	0	85	153	438	12.0	0.6	0.80	--	1120	
05/24/68	--	--	7.9		4.54	0.41	12.00	0.15	0.00	1.39	3.18	12.35	0.19				1025	
					26	2	70	1	0	8	19	72	1					
TROY HYDRO SUBUNIT						W28F0												
TROY HYDRO SUBAREA						W28F2												
09N/04E-08O01S	36	5050	--	1910	3	4	395	1	11	329	301	203	0.1	4.8	2.30	--	1180	
05/29/68	--	--	8.6		0.15	0.33	17.18	0.02	0.37	5.39	6.27	5.72	0.00				1087	
					1	2	97	0	2	30	35	32	0					
09N/02E-36C01S	36	5100	--	2218	271	58	160	10	0	95	756	265	3.1	0.7	3.50	--	1736	
12/28/67	--	--	7.7		13.52	4.77	6.96	0.25	0.00	1.56	15.74	7.47	0.05				1574	
					53	19	27	1	0	6	63	30	0					
09N/04E-21C01S	36	5050	--	2830	48	7	545	2	6	380	424	423	5.7	2.4	2.70	--	1660	
05/29/68	--	--	8.5		2.39	0.57	23.71	0.05	0.20	6.23	8.83	11.93	0.09				1653	
					9	2	89	0	1	23	32	44	0					
09N/04E-31R01S	36	5050	--	2190	72	10	396	2	0	430	504	156	9.5	2.7	4.60	--	1420	
05/29/68	--	--	8.3		3.59	0.82	17.22	0.05	0.00	7.05	10.49	4.40	0.15				1369	
					17	4	79	0	0	32	47	20	1					
AFTON HYDRO SUBUNIT						W28G0												
CAVES HYDRO SUBAREA						W28G1												
10N/03E-15B02S	36	5050	--	446	22	3	61	1	0	122	48	35	0.0	0.7	0.70	--	260	
05/24/68	--	--	8.2		1.10	0.25	2.65	0.02	0.00	2.00	1.00	0.99	0.00				232	
					27	6	66	1	0	50	25	25	0					
11N/06E-18R01S	36	5050	--	522	44	9	50	2	0	201	37	29	4.5	0.6	0.20	--	288	
05/22/68	--	--	8.3		2.19	0.74	2.17	0.05	0.00	3.29	0.77	0.82	0.07				276	
					42	14	42	1	0	66	15	16	1					

TABLE E-1

MINERAL ANALYSES OF GROUND WATER

SOUTHERN CALIFORNIA

DATE	WELL NO.	COUNTY	LAB	TEMP	EC	MINERAL CONSTITUENTS IN				MILLIGRAMS PER LITER				MILLIGRAMS PER LITER				TDS 180C (*105C) SUM	TH NCH
						CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	8	SI02		
DATE	TIME		SAMPLER	PH		MOJAVE HYDRO UNIT				W2800									
WAKER HYDRO SUBUNIT						W28H0				W2800									
SILVER LAKE HYDRO SUBAREA						W28H1				W2800									
11/09E-30E02S	36	5050	92	1550	30	28	241	11	0	280	167	221	14.0	1.0	1.10	--	898	190	
15/28/68	--	--	8.2		1.50	2.30	10.48	0.28	0.00	4.59	3.48	6.23	0.22				852	0	
					10	16	72	2	0	32	24	43	1						
SODA LAKE HYDRO SUBAREA						W28H2				W2800									
11/08E-36B02S	36	5050	--	1570	31	30	237	11	9	263	169	223	14.0	1.0	1.10	--	912	201	
15/28/68	--	--	8.6		1.55	2.47	10.31	0.28	0.30	4.31	3.52	6.29	0.22				856	0	
					11	17	71	2	2	29	24	43	1						

TABLE E-1
MINERAL ANALYSES OF GROUND WATER

SOUTHERN CALIFORNIA

STATE WELL NO. DATE	COUNTY	LAB SAMPLER	TEMP PH	EC	MINERAL CONSTITUENTS IN				MILLIGRAMS PER LITER MILLIEQUIVALENTS PER LITER PERCENT REACTANCE VALUES				MILLIGRAMS PER LITER				TDS 180C (*105C) SUM
					CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SI02	
LUCERNE HYDRO UNIT																	
X0100																	
03N/01E-03F01S 07/10/68 --	36	5100	--	413	44	20	19	2	10	220	21	7	3.2	0.8	0.01	--	217
		--	8.3		2.19	1.64	0.83	0.05	0.33	3.60	0.44	0.20	0.05				236
					46	35	17	1	7	78	9	4	1				
04N/01E-01R02S 01/12/68 --	36	5100	--	1143	29	3	214	5	0	127	254	119	2.2	3.3	0.23	--	675
		--	8.1		1.45	0.25	9.31	0.13	0.00	2.08	5.29	3.35	0.03				693
					14	2	84	1	0	19	49	31	0				
07/09/68 --	36	5100	--	1089	21	4	200	5	0	100	244	119	0.2	4.9	0.80	--	629
		--	8.0		1.05	0.33	8.70	0.13	0.00	1.64	5.08	3.35	0.00				649
					10	3	85	1	0	16	50	33	0				
04N/01E-06H01S 01/12/68 --	36	5100	--	1062	106	46	75	2	0	351	236	53	6.5	0.4	0.37	--	717
		--	8.4		5.29	3.78	3.26	0.05	0.00	5.75	4.91	1.49	0.10				698
					43	30	26	0	0	47	40	12	1				
07/03/68 --	36	5100	--	483	50	18	35	2	0	181	87	24	1.2	0.5	0.10	--	305
		--	7.8		2.49	1.48	1.52	0.05	0.00	2.97	1.81	0.68	0.02				307
					45	27	27	1	0	54	33	12	0				
04N/01E-06001S 01/09/68 --	36	5100	--	1176	115	48	56	2	0	159	235	161	11.0	0.6	0.07	--	820
		--	7.8		5.74	3.95	2.43	0.05	0.00	2.61	4.89	4.54	0.18				707
					47	32	20	0	0	21	40	37	1				
07/03/68 --	36	5100	--	1093	110	47	55	2	0	151	226	147	10.0	0.6	0.05	--	839
		--	7.7		5.49	3.86	2.39	0.05	0.00	2.47	4.70	4.14	0.16				672
					46	33	20	0	0	21	41	36	1				
04N/01E-09A01S 01/12/68 --	36	5100	--	577	57	20	33	2	0	129	151	21	0.4	0.5	0.04	--	357
		--	8.1		2.84	1.64	1.43	0.05	0.00	2.11	3.14	0.59	0.01				349
					48	27	24	1	0	36	54	10	0				
07/09/68 --	36	5100	--	519	57	20	33	2	0	124	155	23	1.4	0.5	0.00	--	438
		--	7.8		2.84	1.64	1.43	0.05	0.00	2.03	3.23	0.65	0.02				353
					48	27	24	1	0	34	54	11	0				
04N/01E-12N01S 01/12/68 --	36	5100	--	765	45	35	59	4	0	124	139	94	4.2	0.6	0.04	--	468
		--	8.2		2.24	2.88	2.57	0.10	0.00	2.03	2.89	2.65	0.07				442
					29	37	33	1	0	27	38	35	1				
07/09/68 --	36	5100	--	784	49	37	62	4	0	117	150	112	3.7	0.7	0.05	--	515
		--	8.1		2.44	3.04	2.70	0.10	0.00	1.92	3.12	3.16	0.06				476
					29	37	32	1	0	23	38	38	1				
04N/01E-32A01S 01/29/68 --	36	5100	--	645	32	25	69	14	14	276	70	25	0.0	1.8	0.08	--	390
		--	8.2		1.60	2.05	3.00	0.36	0.47	4.52	1.46	0.70	0.00				387
					23	29	43	5	6	63	20	10	0				
07/10/68 --	36	5100	--	603	40	20	60	12	0	286	63	18	0.0	1.5	0.12	--	363
		--	7.9		1.99	1.64	2.61	0.31	0.00	4.69	1.31	0.51	0.00				356
					30	25	40	5	0	72	20	8	0				
04N/02E-07N01S 01/12/68 --	36	5100	--	1174	81	43	101	6	0	103	294	147	1.7	0.8	0.21	--	753
		--	8.1		4.04	3.54	4.39	0.15	0.00	1.69	6.12	4.14	0.03				726
					33	29	36	1	0	14	51	35	0				
07/09/68 --	36	5100	--	1126	80	43	100	6	0	95	298	136	1.0	0.9	0.15	--	894
		--	7.5		3.99	3.54	4.35	0.15	0.00	1.56	6.20	3.83	0.02				712
					33	29	36	1	0	13	53	33	0				
04N/02E-17R01S 01/12/68 --	36	5100	--	639	43	21	56	3	0	122	104	50	42.0	0.7	0.06	--	379
		--	8.3		2.14	1.73	2.43	0.08	0.00	2.00	2.16	1.41	0.68				380
					34	27	38	1	0	32	35	22	11				
07/09/68 --	36	5100	--	550	34	18	54	3	0	127	93	39	28.0	0.8	0.06	--	318
		--	8.0		1.70	1.48	2.35	0.08	0.00	2.08	1.94	1.10	0.45				333
					30	26	42	1	0	37	35	20	8				
04N/02E-25J01S 07/09/68 --	36	5100	--	938	92	29	76	7	0	195	285	44	0.0	0.8	0.13	--	740
		--	7.7		4.59	2.38	3.30	0.18	0.00	3.20	5.93	1.24	0.00				630
					44	23	32	2	0	31	57	12	0				
04N/03E-23G01S 01/29/68 --	36	5100	--	1225	84	62	100	6	0	144	378	123	3.9	0.6	0.00	--	889
		--	8.0		4.19	5.10	4.35	0.15	0.00	2.36	7.87	3.47	0.06				829
					30	37	31	1	0	17	57	25	0				
05N/01E-17002S 07/09/68 --	36	5100	--	1409	56	18	257	3	0	156	233	258	18.0	2.5	0.94	--	968
		--	7.8		2.79	1.48	11.18	0.08	0.00	2.56	4.85	7.27	0.29				924
					18	9	72	0	0	17	32	49	2				
05N/01E-19P01S 07/09/68 --	36	5100	--	2657	280	93	182	4	0	105	270	795	1.9	0.5	0.03	--	3109
		--	7.6		13.97	7.65	7.92	0.10	0.00	1.72	5.62	22.42	0.03				1679
					47	26	27	0	0	6	19	75	0				
05N/01E-23C01S 01/12/68 --	36	5100	--	7231	227	19	1332	13	0	98	535	2075	0.5	1.5	0.41	--	4395
		--	7.9		11.33	1.56	57.94	0.33	0.00	1.61	11.14	58.51	0.01				4252
					16	2	81	0	0	2	16	82	0				
07/03/68 --	36	5100	--	8203	266	23	1530	15	0	105	600	2370	1.1	3.9	5.63	--	5015
		--	7.4		13.27	1.89	66.55	0.38	0.00	1.72	12.49	66.83	0.02				4867
					16	2	81	0	0	2	15	82	0				

TABLE E-1

MINERAL ANALYSES OF GROUND WATER

SOUTHERN CALIFORNIA

DATE	WELL NO.	COUNTY	LAB SAMPLER	TEMP PH	EC	MINERAL CONSTITUENTS IN				MILLIGRAMS PER LITER MILLIEQUIVALENTS PER LITER PERCENT REACTANCE VALUES				MILLIGRAMS PER LITER				TDS 180C (*105C) SUM	TH NCH
						CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SiO2		
						LUCERNE HYDRO UNIT				X0100									
1/12/68	29N01S	36	5100	--	1571	151	57	66	3	0	110	151	375	3.6	0.3	0.05	--	1252	612
				8.0		7.53	4.69	2.87	0.08	0.00	1.80	3.14	10.57	0.06				861	521
						50	31	19	0	0	12	20	68	0					
7/03/68		36	5100	--	1464	131	47	60	2	0	115	91	325	4.3	0.4	0.05	--	1114	520
				7.6		6.54	3.86	2.61	0.05	0.00	1.88	1.89	9.16	0.07				718	426
						50	30	20	0	0	14	15	70	0					
7/03/68	31F01S	36	5100	--	687	58	20	50	2	0	151	96	75	1.4	0.4	0.03	--	428	227
				7.8		2.89	1.64	2.17	0.05	0.00	2.47	2.00	2.11	0.02				378	103
						43	24	32	1	0	37	30	32	0					
7/03/68	31001S	36	5100	--	769	76	28	41	2	0	168	136	68	10.4	0.4	0.08	--	481	305
				7.8		3.79	2.30	1.78	0.05	0.00	2.75	2.83	1.92	0.17				445	167
						48	29	22	1	0	36	37	25	2					
1/12/68	32P01S	36	5100	--	1862	127	64	186	3	0	281	387	251	0.7	0.4	0.40	--	1227	580
				7.9		6.34	5.26	8.09	0.08	0.00	4.60	8.06	7.08	0.01				1158	350
						32	27	41	0	0	23	41	36	0					
7/03/68		36	5100	--	1842	143	64	176	3	0	330	376	215	28.0	0.4	0.53	--	1300	620
				7.8		7.13	5.26	7.65	0.08	0.00	5.41	7.83	6.06	0.45				1169	350
						35	26	38	0	0	27	40	31	2					
7/03/68	32R01S	36	5100	--	620	54	21	46	2	0	129	160	29	1.5	0.5	0.03	--	434	221
				8.1		2.69	1.73	2	0.05	0.00	2.11	3.33	0.82	0.02				378	115
						42	27	31	1	0	34	53	13	0					
7/03/68	01A01S	36	5100	--	883	86	33	59	3	0	142	108	185	0.0	0.6	0.08	--	589	350
				8.2		4.29	2.71	2.57	0.08	0.00	2.33	2.25	5.22	0.00				545	234
						44	28	27	1	0	24	23	53	0					
7/09/68	01E01S	36	5100	--	571	34	41	25	2	0	239	51	30	9.3	0.5	0.01	--	333	254
				8.3		1.70	3.37	1.09	0.05	0.00	3.92	1.06	0.85	0.15				311	58
						27	54	17	1	0	66	18	14	2					
7/03/68		36	5100	--	557	33	39	25	2	0	222	47	36	6.3	0.6	0.01	--	348	243
				7.8		1.65	3.21	1.09	0.05	0.00	3.64	0.98	1.01	0.10				299	61
						27	53	18	1	0	63	17	18	2					
7/09/68	01J01S	36	5100	--	545	45	22	37	2	0	190	85	21	3.9	0.5	0.01	--	327	203
				8.2		2.24	1.81	1.61	0.05	0.00	3.11	1.77	0.59	0.06				310	47
						39	32	28	1	0	56	32	11	1					
7/03/68		36	5100	--	511	46	22	38	2	0	190	85	25	2.8	0.6	0.05	--	302	205
				7.8		2.29	1.81	1.65	0.05	0.00	3.11	1.77	0.70	0.04				315	50
						39	31	28	1	0	55	31	12	1					
7/03/68		36	5100	--	769	58	30	64	3	0	207	159	46	7.3	0.6	0.09	--	487	268
				7.8		2.89	2.47	2.78	0.08	0.00	3.39	3.31	1.30	0.12				470	98
						35	30	34	1	0	42	41	16	1					
7/09/68	01P02S	36	5100	--	1729	128	80	152	4	31	305	437	129	45.0	0.5	0.23	--	1242	649
				8.4		6.39	6.58	6.61	0.10	1.03	5.00	9.10	3.64	0.72				1157	347
						32	33	34	0	5	26	47	19	4					
7/02/68		36	5100	--	1564	169	87	63	4	0	227	422	179	50.0	0.5	0.00	--	1411	780
				8.0		8.43	7.15	2.74	0.10	0.00	3.72	8.79	5.05	0.81				1087	594
						46	39	15	0	0	20	48	27	4					
7/03/68	02H04S	36	5100	--	3004	206	97	250	5	0	146	152	810	3.3	0.6	0.25	--	2484	914
				7.6		10.28	7.98	10.87	0.13	0.00	2.39	3.16	22.84	0.05				1596	794
						35	27	37	0	0	8	11	80	0					
7/02/68	09R01S	36	5100	--	812	91	17	55	2	0	195	112	76	32.0	0.8	0.16	--	535	297
				7.8		4.54	1.40	2.39	0.05	0.00	3.20	2.33	2.14	0.52				482	137
						54	17	28	1	0	39	28	26	6					
7/09/68	11001S	36	5100	--	688	65	35	40	1	0	351	56	14	21.0	0.4	0.01	--	419	306
				8.2		3.24	2.88	1.74	0.02	0.00	5.75	1.16	0.39	0.34				405	18
						41	36	22	0	0	75	15	5	4					
7/02/68		36	5100	--	696	66	33	39	1	0	334	61	17	20.0	0.5	0.00	--	433	301
				8.3		3.29	2.71	1.70	0.02	0.00	5.47	1.27	0.48	0.32				402	27
						43	35	22	0	0	72	17	6	4					
7/09/68	14004S	36	5100	--	424	46	22	15	2	0	229	29	15	3.8	0.1	0.01	--	251	205
				8.1		2.29	1.81	0.65	0.05	0.00	3.75	0.60	0.42	0.06				246	18
						48	38	14	1	0	77	12	9	1					
7/02/68		36	5100	--	437	46	22	14	2	0	232	38	7	3.9	0.3	0.00	--	271	205
				8.3		2.29	1.81	0.61	0.05	0.00	3.80	0.79	0.20	0.06				248	15
						48	38	13	1	0	78	16	4	1					
7/09/68	18E01S	36	5100	--	2017	161	86	230	7	58	256	807	91	4.5	2.3	2.90	--	1681	756
				8.4		8.03	7.07	10.00	0.18	1.93	4.19	16.80	2.57	0.07				1576	449
						32	28	40	1	8	16	66	10	0					
7/02/68		36	5100	--	1274	54	24	193	6	0	200	407	43	1.4	1.3	3.13	--	889	234
				8.0		2.69	1.97	8.39	0.15	0.00	3.28	8.47	1.21	0.02				832	70
						20	15	63	1	0	25	65	9	0					

TABLE E-1

MINERAL ANALYSES OF GROUND WATER

SOUTHERN CALIFORNIA

STATE WELL NO. DATE	COUNTY	LAB SAMPLER	TEMP PH	EC	MINERAL CONSTITUENTS IN				MILLIGRAMS PER LITER MILLIEQUIVALENTS PER LITER PERCENT REACTANCE VALUES				MILLIGRAMS PER LITER				TDS 180C (*105C) SUM
					CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SiO2	
JOHNSON HYDRO UNIT																	
X0200																	
02N/02E-19A01S 04/15/68 --	36	5100	--	284	28	14	10	1	0	161	7	5	0.5	0.2	0.00	--	171
		--	7.8		1.40	1.15	0.43	0.02	0.00	2.64	0.14	0.14	0.01				145
					46	38	14	1	0	90	5	5	0				
04N/03E-31C01S 02/13/68 --	36	5100	--	808	82	24	59	5	0	129	266	33	1.9	0.6	0.19	--	470
		--	7.5		4.09	1.97	2.57	0.13	0.00	2.11	5.54	0.93	0.03				536
					47	22	29	1	0	24	64	11	0				
07/09/68 --	36	5100	--	752	72	26	54	5	2	110	256	38	1.5	0.6	0.13	--	555
		--	8.3		3.59	2.14	2.35	0.13	0.07	1.80	5.33	1.07	0.02				510
					44	26	29	2	1	22	64	13	0				
04N/03E-31F01S 01/29/68 --	36	5100	--	865	60	22	100	5	0	137	283	37	2.6	1.8	0.00	--	600
		--	8.0		2.99	1.81	4.35	0.13	0.00	2.24	5.89	1.04	0.04				579
					32	19	47	1	0	24	64	11	0				
07/09/68 --	36	5100	--	772	87	4	95	5	10	107	281	35	2.2	1.8	0.26	--	586
		--	8.4		4.34	0.33	4.13	0.13	0.33	1.75	5.85	0.99	0.03				574
					49	4	46	1	4	20	65	11	0				
04N/03E-31G01S 01/29/68 --	36	5100	--	843	67	23	80	5	0	129	265	34	3.2	0.8	0.08	--	566
		--	8.1		3.34	1.89	3.48	0.13	0.00	2.11	5.52	0.96	0.05				542
					38	21	39	1	0	24	64	11	1				
07/09/68 --	36	5100	--	755	65	21	73	5	5	110	263	33	2.8	0.9	0.22	--	563
		--	8.4		3.24	1.73	3.17	0.13	0.17	1.80	5.47	0.93	0.04				523
					39	21	38	1	2	21	65	11	0				
04N/04E-19C01S 01/29/68 --	36	5100	--	3570	240	164	372	9	0	151	1067	555	16.0	1.0	0.09	--	2718
		--	7.9		11.98	13.49	16.18	0.23	0.00	2.47	22.21	15.65	0.26				2499
					29	32	39	0	0	6	55	38	1				
07/09/68 --	36	5100	--	2443	170	116	259	7	0	154	714	420	10.5	1.3	0.40	--	2170
		--	7.9		8.48	9.54	11.27	0.18	0.00	2.52	14.86	11.84	0.17				1774
					29	32	38	1	0	9	51	40	1				
04N/04E-19E03S 01/29/68 --	36	5100	--	2157	126	108	150	6	0	88	257	515	1.8	0.9	0.18	--	1642
		--	7.9		6.29	8.88	6.52	0.15	0.00	1.44	5.35	14.52	0.03				1209
					29	41	30	1	0	7	25	68	0				
07/09/68 --	36	5100	--	1955	133	106	140	6	0	112	237	500	11.0	0.9	0.17	--	1607
		--	8.0		6.64	8.72	6.09	0.15	0.00	1.83	4.93	14.10	0.18				1190
					31	40	28	1	0	9	23	67	1				
WHITewater HYDRO UNIT																	
X1900																	
SAN GORGONIO HYDRO SUBUNIT																	
SAN GORGONIO HYDRO SUBAREA																	
X19C0																	
X19C2																	
02S/01E-17L01S 10/10/67 --	33	4103	60	272	33	10	8	3	--	141	23	6	0.0	0.4	0.00	--	127
		--	8.3		1.65	0.82	0.35	0.08		2.31	0.48	0.17	0.00				153
					57	28	12	3		78	16	6	0				
02S/01E-33J01S 10/10/67 --	33	4103	62	281	32	12	7	3	1	120	19	8	1.5	0.3	0.00	--	155
		--	8.4		1.60	0.99	0.30	0.08	0.03	1.97	0.39	0.22	0.02				143
					54	33	10	3	1	74	15	8	1				
04/24/68 830	33	5050	60	291	34	12	7	2	--	152	20	6	3.5	0.4	0.00	--	161
		--	7.9		1.70	0.99	0.30	0.05		2.49	0.42	0.17	0.06				160
					56	32	10	2		79	13	5	2				
02S/01E-33J02S 10/10/67 --	33	4103	62	285	32	12	8	3	5	138	20	7	1.5	0.3	0.00	--	130
		--	8.4		1.60	0.99	0.35	0.08	0.17	2.26	0.42	0.20	0.02				157
					53	33	12	2	5	74	14	6	1				
04/24/68 840	33	5050	62	293	35	11	7	2	--	153	20	7	3.0	0.4	0.02	--	133
		--	8.2		1.75	0.90	0.30	0.05		2.51	0.42	0.20	0.05				161
					58	30	10	2		79	13	6	1				
03S/01E-07E01S 04/24/68 730	33	5050	70	376	39	12	24	1	--	203	10	15	4.8	0.3	0.00	--	185
		--	8.0		1.95	0.99	1.04	0.02		3.33	0.21	0.42	0.08				206
					49	25	26	1		82	5	10	2				
03S/02E-22B01S 10/05/67 845	33	4103	66	432	16	22	41	6	--	235	1	23	1.0	0.5	0.04	--	259
		--	7.9		0.80	1.81	1.78	0.15		3.85	0.02	0.65	0.02				227
					18	40	39	3		85	0	14	0				
04/30/68 830	33	5050	66	404	30	10	39	6	--	210	0	22	0.8	0.5	0.03	--	225
		--	7.8		1.50	0.82	1.70	0.15		3.44	0.00	0.62	0.01				212
					36	20	41	4		84	0	15	0				
03S/02E-23C01S 10/05/67 --	33	4103	68	276	8	14	28	3	0	129	11	16	4.0	0.5	0.03	--	200
		--	8.0		0.40	1.15	1.22	0.08	0.00	2.11	0.23	0.45	0.06				148
					14	40	43	3	0	74	8	16	2				
COACHELLA HYDRO SUBUNIT																	
MISSION CREEK HYDRO SUBAREA																	
X1900																	
X1902																	
03S/04E-22A02S 10/05/67 --	33	4103	78	366	5	2	72	2	0	93	63	20	3.5	0.5	0.03	--	232
		--	7.9		0.25	0.16	3.13	0.05	0.00	1.52	1.31	0.56	0.06				214
					7	5	87	1	0	44	38	16	2				

TABLE E-1

MINERAL ANALYSES OF GROUND WATER

SOUTHERN CALIFORNIA

DATE	WELL NO.	COUNTY	LAB SAMPLER	TEMP PH	EC	MINERAL CONSTITUENTS IN				MILLIGRAMS PER LITER MILLIEQUIVALENTS PER LITER PERCENT REACTANCE VALUES				MILLIGRAMS PER LITER				TDS 180C (*105C) SUM	TH NCH	
						CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SI02			
MACHELLA HYDRO SUBUNIT						X1900														
MISSION CREEK HYDRO SUBAREA						X1900														
						X1902														
5/05E-14M025	33	5050	88	1365	31	1	260	5	--	57	397	123	3.0	7.8	1.12	--	851	81		
4/26/68	1210	--	7.7		1.55	0.08	11.31	0.13		0.93	8.26	3.47	0.05				857	35		
					12	1	86	1		7	65	27	0							
5/05E-18M015	33	4103	--	670	40	14	75	7	0	141	177	20	1.0	1.3	0.02	--	416	157		
0/05/67	--	--	8.2		1.99	1.15	3.26	0.18	0.00	2.31	3.68	0.56	0.02				405	42		
					30	17	49	3	0	35	56	9	0							
5/05E-18R015	33	4103	--	1218	56	33	152	13	0	98	431	56	0.5	0.9	0.07	--	884	276		
0/05/67	--	--	7.9		2.79	2.71	6.61	0.33	0.00	1.61	8.97	1.58	0.01				791	195		
					22	22	53	3	0	13	74	13	0							
5/05E-20D015	33	4103	--	1076	68	19	127	9	0	91	380	48	4.0	1.1	0.05	--	744	248		
0/05/67	--	--	8.0		3.39	1.56	5.52	0.23	0.00	1.49	7.91	1.35	0.06				701	173		
					32	15	52	2	0	14	73	12	1							
MIRACLE HILL HYDRO SUBAREA						X1903														
5/05E-30L015	33	4103	--	1561	32	5	280	6	0	38	478	126	8.0	4.0	0.82	--	972	100		
0/06/67	--	--	7.9		1.60	0.41	12.18	0.15	0.00	0.62	9.95	3.55	0.13				959	69		
					11	3	85	1	0	4	70	25	1							
2/19/68	800	33	5050	116	1584	35	4	285	10	--	40	498	133	4.0	5.8	0.82	--	985	104	
			--	7.9		1.75	0.33	12.40	0.25		0.65	10.37	3.75	0.06			996	71		
					12	2	84	2		4	70	25	0							
5/05E-30L025	33	4103	--	1212	52	24	172	9	0	117	394	66	5.0	1.0	0.11	--	814	229		
0/05/67	--	--	7.9		2.59	1.97	7.48	0.23	0.00	1.92	8.20	1.86	0.08				781	133		
					21	16	61	2	0	16	68	15	1							
5/04E-10J015	33	4103	--	354	15	5	51	4	0	152	15	22	3.0	0.6	0.02	--	178	58		
0/05/67	--	--	7.8		0.75	0.41	2.22	0.10	0.00	2.49	0.31	0.62	0.05				191	0		
					21	12	64	3	0	72	9	18	1							
SKY VALLEY HYDRO SUBAREA						X1904														
5/08E-32Q035	33	5050	64	192	16	3	21	0	--	76	14	16	2.0	0.2	0.02	--	165	52		
3/29/68	--	--	7.7		0.80	0.25	0.91	0.00		1.24	0.29	0.45	0.03				110	0		
					41	13	47	0		62	14	22	2							
5/07E-15A015	33	5050	--	1190	13	1	222	5	2	65	304	70	2.0	17.0	1.30	--	689	37		
5/28/68	--	--	8.7		0.65	0.08	9.66	0.13	0.07	1.06	6.33	1.97	0.03				670#	0		
					6	1	92	1	1	11	67	21	0							
THOUSAND PALMS HYDRO SUBAREA						X1906														
5/06E-05M015	33	5050	--	1330	69	22	176	10	0	92	444	71	5.4	1.5	0.30	--	850	263		
5/28/68	--	--	8.2		3.44	1.81	7.65	0.25	0.00	1.51	9.24	2.00	0.09				845	187		
					26	14	58	2	0	12	72	16	1							
5/06E-17R015	33	5050	77	427	45	3	34	5	0	141	65	11	2.3	0.8	0.00	--	244	125		
5/28/68	930	--	8.3		2.24	0.25	1.48	0.13	0.00	2.31	1.35	0.31	0.04				236	9		
					55	6	36	3	0	58	34	8	1							
INDIO HYDRO SUBAREA						X1907														
5/03E-08M015	33	5050	76	344	36	9	24	2	--	169	13	18	5.0	0.5	0.00	--	246	127		
4/26/68	1435	--	8.2		1.80	0.74	1.04	0.05		2.77	0.27	0.51	0.08				191	0		
					49	20	29	1		76	7	14	2							
5/04E-36M015	33	5100	72	390	48	10	17	3	0	194	27	13	3.0	0.7	0.00	--	213	161		
0/13/67	--	--	8.0		2.39	0.82	0.74	0.08	0.00	3.18	0.56	0.37	0.05				218	2		
					59	20	18	2	0	76	13	9	1							
4/22/68	855	33	5050	70	383	46	12	17	3	--	193	26	13	3.0	0.7	0.00	--	191	164	
			--	8.1		2.29	0.99	0.74	0.08		3.16	0.54	0.37	0.05			216	6		
					56	24	18	2		77	13	9	1							
5/04E-01N025	33	4103	70	318	36	8	17	3	0	158	13	12	3.0	0.6	0.00	--	122	123		
0/13/67	--	--	8.1		1.80	0.66	0.74	0.08	0.00	2.59	0.27	0.34	0.05				171	0		
					55	20	23	2	0	80	8	10	1							
4/22/68	845	33	5050	72	317	36	8	17	2	--	162	13	13	2.5	0.7	0.00	--	156	123	
			--	8.1		1.80	0.66	0.74	0.05		2.65	0.27	0.37	0.04			172	0		
					55	20	23	2		80	8	11	1							
5/04E-11K015	33	4103	74	466	51	10	32	5	0	184	44	26	13.0	0.5	0.02	--	267	168		
0/13/67	--	--	8.1		2.54	0.82	1.39	0.13	0.00	3.01	0.92	0.73	0.21				272	18		
					52	17	28	3	0	62	19	15	4							
5/04E-11Q015	33	4103	76	458	50	9	33	8	0	198	42	22	7.0	0.3	0.02	--	254	162		
0/13/67	--	--	8.2		2.49	0.74	1.43	0.20	0.00	3.24	0.87	0.62	0.11				269	0		
					51	15	29	4	0	67	18	13	2							
4/22/68	1130	33	5050	78	431	44	9	31	3	--	176	45	21	6.5	0.3	0.02	--	224	147	
			--	8.1		2.19	0.74	1.35	0.08		2.88	0.94	0.59	0.10			247	3		
					50	17	31	2		64	21	13	2							
5/04E-23C015	33	5050	62	293	30	6	16	2	--	85	6	25	29.0	0.2	0.00	--	187	100		
4/23/68	1130	--	7.9		1.50	0.49	0.69	0.05		1.39	0.12	0.70	0.47				156	30		
					55	18	25	2		52	5	26	17							

TABLE E-1
MINERAL ANALYSES OF GROUND WATER
SOUTHERN CALIFORNIA

STATE WELL NO. DATE	COUNTY TIME	LAB SAMPLER	TEMP PH	EC	MINERAL CONSTITUENTS IN				MILLIGRAMS PER LITER MILLIEQUIVALENTS PER LITER PERCENT REACTANCE VALUES				MILLIGRAMS PER LITER				TDS 180C (*105C) SUM
					CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SI02	
COACHELLA HYDRO SUBUNIT INDIO HYDRO SUBAREA					X1900	WHITTEWATER HYDRO UNIT				X1900							
04S/04E-23E01S 10/12/67 --	33	4103	66 7.9	200	21 1.05 54	3 0.25 13	14 0.61 31	2 0.05 3	0 0.00 0	87 1.42 70	13 0.27 13	9 0.25 12	4.5 0.07 4	0.0	0.00	--	101 110
04/22/68 1145	33	5050	70 8.0	200	21 1.05 53	4 0.33 16	13 0.56 28	2 0.05 3	-- 0.00 0	89 1.46 68	14 0.29 14	10 0.28 13	6.0 0.10 4	0.2	0.00	--	128 114*
04S/04E-26A01S 10/13/67 --	33	4103	68 8.1	424	49 2.44 57	8 0.66 15	26 1.13 26	3 0.08 2	0 0.00 0	142 2.33 53	70 1.46 33	20 0.56 13	1.0 0.02 0	0.3	0.01	--	246 248
04/22/68 1045	33	5050	72 7.9	427	49 2.44 56	9 0.74 17	25 1.09 25	3 0.08 2	-- 0.00 0	145 2.38 53	72 1.50 34	20 0.56 13	0.0 0.00 0	0.3	0.00	--	247 250
04S/05E-15R01S 05/28/68 --	33	5050	-- 8.3	353	46 2.29 65	4 0.33 9	18 0.78 22	4 0.10 3	0 0.00 0	182 2.98 80	22 0.46 12	7 0.20 5	5.7 0.09 2	0.7	0.00	--	193 197*
04S/05E-33B01S 04/23/68 1310	33	5050	70 8.1	445	53 2.64 56	9 0.74 16	29 1.26 27	2 0.05 1	-- 0.00 0	156 2.56 55	65 1.35 29	22 0.62 13	5.5 0.09 2	0.4	0.00	--	305 263
04S/05E-33B02S 04/22/68 1420	33	5050	76 8.2	427	50 2.49 56	10 0.82 19	24 1.04 24	2 0.05 1	-- 0.00 0	153 2.51 56	59 1.23 27	19 0.53 12	13.0 0.21 5	0.3	0.00	--	282 253
04S/05E-33G01S 04/23/68 1300	33	5050	-- 8.1	478	58 2.89 59	10 0.82 17	26 1.13 23	2 0.05 1	-- 0.00 0	168 2.75 56	65 1.35 27	22 0.62 13	12.0 0.19 4	0.4	0.00	--	315 278
05/28/68 1100	33	5050	70 8.2	516	70 3.49 72	1 0.08 2	27 1.17 24	3 0.08 2	0 0.00 0	170 2.79 58	66 1.37 29	18 0.51 11	7.7 0.12 3	0.3	0.10	--	296 277
05S/05E-02F02S 04/23/68 915	33	5050	80 8.1	402	42 2.09 52	7 0.57 14	29 1.26 31	3 0.08 2	-- 0.00 0	135 2.21 54	54 1.12 27	24 0.68 16	5.5 0.09 2	0.3	0.00	--	223 232
05S/06E-21G04S 05/28/68 --	33	5050	-- 8.1	565	68 3.39 67	3 0.25 5	31 1.35 26	4 0.10 2	0 0.00 0	159 2.61 52	70 1.46 29	33 0.93 19	1.1 0.02 0	0.2	0.00	--	329 289
05S/07E-16K01S 05/28/68 --	33	5050	-- 8.2	308	32 1.60 53	6 0.49 16	19 0.83 27	4 0.10 3	0 0.00 0	150 2.46 84	15 0.31 11	6 0.17 6	0.0 0.00 0	0.8	0.10	--	173 157
05S/07E-22K01S 05/28/68 1330	33	5050	74 8.1	1210	153 7.63 62	19 1.56 13	65 2.83 23	8 0.20 2	0 0.00 0	197 3.23 26	290 6.04 49	99 2.79 23	10.0 0.16 1	0.4	0.10	--	787 742
05S/07E-33N01S 05/28/68 --	33	5050	-- 8.1	956	120 5.99 66	10 0.82 9	48 2.09 23	6 0.15 2	0 0.00 0	127 2.08 23	213 4.43 48	89 2.51 27	9.5 0.15 2	0.2	0.20	--	632 559
06S/06E-01G01S 05/28/68 --	33	5050	-- 8.2	287	12 0.60 22	1 0.08 3	44 1.91 72	3 0.08 3	0 0.00 0	76 1.24 46	24 0.50 19	28 0.79 29	9.7 0.16 6	0.4	0.00	--	165 160
06S/08E-07P01S 05/28/68 --	33	5050	-- 8.2	768	90 4.49 64	6 0.49 7	45 1.96 28	4 0.10 1	0 0.00 0	112 1.83 26	118 2.46 34	90 2.54 36	18.0 0.29 4	0.4	0.00	--	483 427
06S/08E-09O03S 05/28/68 --	33	5050	-- 8.3	265	10 0.50 20	1 0.08 3	41 1.78 73	3 0.08 3	0 0.00 0	90 1.47 58	28 0.58 23	8 0.22 9	15.0 0.24 10	0.8	0.10	--	159 152
06S/08E-10A03S 05/28/68 1530	33	5050	78 8.2	504	21 1.05 23	1 0.08 2	75 3.26 73	3 0.08 2	0 0.00 0	90 1.47 36	71 1.48 36	40 1.13 28	0.0 0.00 0	5.9	0.30	--	285 262*
06S/08E-34P01S 05/28/68 1600	33	5050	73 8.3	387	22 1.10 30	3 0.25 7	53 2.30 63	1 0.02 1	0 0.00 0	134 2.20 62	37 0.77 22	20 0.56 16	0.0 0.00 0	2.0	0.00	--	218 204
07S/08E-28P01S 05/28/68 --	33	5050	-- 8.3	732	29 1.45 22	6 0.49 8	100 4.35 67	6 0.15 2	0 0.00 0	139 2.28 35	116 2.41 37	59 1.66 26	5.7 0.09 1	0.8	0.10	--	409 391
07S/09E-29R02S 05/29/68 --	33	5050	-- 9.4	286	3 0.15 6	0 0.00 0	58 2.52 94	0 0.00 0	19 0.63 25	56 0.92 37	33 0.69 28	9 0.25 10	0.0 0.00 0	2.8	0.10	--	173 153*
08S/08E-10B01S 05/29/68 --	33	5050	-- 8.1	1520	90 4.49 32	11 0.90 6	196 8.52 60	7 0.18 1	0 0.00 0	47 0.77 5	320 6.66 48	203 5.72 41	51.0 0.82 6	0.4	0.10	--	934 902

TABLE E-1

MINERAL ANALYSES OF GROUND WATER

SOUTHERN CALIFORNIA

STATE WELL NO. DATE	COUNTY TIME	LAB SAMPLER	TEMP PH	EC	MINERAL CONSTITUENTS IN				MILLIGRAMS PER LITER MILLIEQUIVALENTS PER LITER PERCENT REACTANCE VALUES				MILLIGRAMS PER LITER				TDS 180C (*105C) SUM	TH NCH
					CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SI02		
BORREGO HYDRO SUBUNIT					ANZA-BORREGO HYDRO UNIT				X2200									
TERWILLIGER HYDRO SUBAREA					X22A1													
95/03E-12D01S	33	5050	--	744	68	15	58	2	0	132	143	60	11.0	0.3	0.00	--	477	231
95/01/68	--	--	8.3		3.39	1.23	2.52	0.05	0.00	2.16	2.98	1.69	0.18				423	123
					47	17	35	1	0	31	42	24	2					
BORREGO HYDRO SUBAREA					X22A3													
95/06E-24C01S	90	5050	--	1640	100	0	224	10	0	20	365	244	1.0	0.6	0.30	--	1010	250
95/29/68	--	--	7.7		4.99	0.00	9.74	0.25	0.00	0.33	7.60	6.88	0.02				955	233
					33	0	65	2	0	2	51	46	0					
95/06E-35N01S	90	5050	--	1060	69	7	135	8	0	92	312	67	1.0	0.4	0.20	--	688	201
95/29/68	--	--	8.3		3.44	0.57	5.87	0.20	0.00	1.51	6.49	1.89	0.02				645	126
					34	6	58	2	0	15	65	19	0					
JACUMBA HYDRO SUBUNIT					X22G0													
JACUMBA HYDRO SUBAREA					X22G2													
95/08E-07J02S	90	5050	84	752	32	9	101	2	0	114	108	89	1.5	2.4	0.40	--	462	117
95/29/68	1530	--	7.9		1.60	0.74	4.39	0.05	0.00	1.87	2.25	2.51	0.02				402	23
					23	11	65	1	0	28	34	38	0					
IMPERIAL HYDRO SUBUNIT					X23A0													
IMPERIAL HYDRO SUBUNIT					X23A0													
95/13E-13D02S	13	5050	104	33784	854	232	7200	504	--	1684	377	12423	0.0	1.8	50.00	--	23271	3087
92/08/68	1430	--	6.4		42.61	19.08	313.20	12.89		27.60	7.85	350.33	0.00				22470	1706
					11	5	81	3		7	2	91	0					
COYOTE WELLS HYDRO SUBUNIT					X23B0													
95/09E-25K01S	13	5050	84	640	27	6	82	5	0	144	40	86	1.8	0.7	0.20	--	367	92
95/08/68	--	--	8.2		1.35	0.49	3.57	0.13	0.00	2.36	0.83	2.42	0.03				320	0
					24	9	64	2	0	42	15	43	0					

TABLE E-1
MINERAL ANALYSES OF GROUND WATER

SOUTHERN CALIFORNIA

STATE WELL NO. DATE	COUNTY TIME	LAB SAMPLER	TEMP PH	EC	MINERAL CONSTITUENTS IN				MILLIGRAMS PER LITER MILLIEQUIVALENTS PER LITER PERCENT REACTANCE VALUES				MILLIGRAMS PER LITER				TDS 180C (*105C) SUM	
					CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SI02		
					SANTA ANA RIVER HYDRO UNIT				Y0100									
LOWER SANTA ANA R HYDRO SUBUNIT Y01A0 EAST COASTAL PLAIN HYDRO SUBAREA Y01A1																		
01S/07W-08N01S 11/21/67	36	5100	-- 7.9	347	49 2.44 66	8 0.66 18	13 0.56 15	2 0.05 1	0 0.00 0	193 3.16 82	11 0.23 6	9 0.25 7	12.0 0.19 5	0.4	0.03	--	213 200	
03S/09W-35001S 10/03/67 1230	30	3102	-- 7.6	1120	--	--	--	--	0 0.00	212 3.47	240 5.00	101 2.85	--	--	--	--	--	
04S/09W-06G02S 11/06/67 1300	30	3102	-- 7.6	1211	--	--	--	--	0 0.00	200 3.28	280 5.83	106 2.99	13.0 0.21	--	--	--	--	
03/11/68 1015	30	5102	-- 7.6	1180	--	--	--	--	0 0.00	204 3.34	277 5.77	111 3.13	--	--	--	--	--	
04S/09W-27F01S 10/31/67	30	3102	-- 7.4	960	--	--	--	--	0 0.00	212 3.47	193 4.02	67 1.89	41.0 0.66	--	--	--	--	
04/18/68 1400	30	5102	-- 7.4	942	--	--	--	--	0 0.00	210 3.44	192 4.00	68 1.92	34.0 0.55	--	--	--	--	
04S/10W-01B01S 03/22/68	30	5102	-- 7.6	1180	--	--	--	--	0 0.00	151 2.47	--	104 2.93	2.0 0.03	--	--	--	--	
04S/10W-14D02S 03/14/68 1345	30	5102	-- 7.8	1060	--	--	--	--	0 0.00	192 3.15	257 5.35	88 2.48	10.0 0.16	--	--	--	--	
04S/10W-14H02S 11/06/67 1315	30	3102	-- 7.6	1020	--	--	--	--	0 0.00	210 3.44	221 4.60	80 2.26	22.0 0.35	--	--	--	--	
03/11/68 910	30	5102	60 7.7	1010	--	--	--	--	0 0.00	214 3.51	210 4.37	83 2.34	22.0 0.35	--	--	--	--	
04S/10W-24D02S 10/27/67	30	3102	-- 7.4	1060	105 5.24 50	22 1.81 17	78 3.39 32	5 0.13 1	0 0.00 0	187 3.06 29	248 5.16 48	82 2.31 22	10.0 0.16 1	0.5	0.10	22	709 665	
03/11/68 900	30	5102	-- 7.7	848	94 4.69 54	18 1.48 17	56 2.43 28	4 0.10 1	0 0.00 0	196 3.21 36	175 3.64 41	66 1.86 21	7.0 0.11 1	0.5	0.03	22	589 539	
04S/10W-24J02S 11/17/67 915	30	3102	-- 7.7	636	--	--	--	--	0 0.00	198 3.24	91 1.89	39 1.10	--	--	--	--	--	
03/18/68 1000	30	5102	-- 7.7	617	--	--	--	--	0 0.00	202 3.31	80 1.66	38 1.07	5.0 0.08	--	--	--	--	
04S/10W-29M01S 06/03/68	30	5050	-- 8.2	1240	150 7.48 59	30 2.47 19	60 2.61 21	5 0.13 1	0 0.00 0	266 4.36 35	178 3.70 29	103 2.90 23	99.0 1.60 13	0.4	0.10	--	826 757	
04S/11W-24P01S 06/03/68	30	5050	-- 8.2	807	100 4.99 59	18 1.48 18	43 1.87 22	3 0.08 1	0 0.00 0	266 4.36 53	136 2.83 34	36 1.01 12	0.7 0.01 0	0.5	0.00	--	509 468	
05S/07W-29E01S 03/14/68 930	30	5102	-- 7.7	581	72 3.59 57	19 1.56 25	25 1.09 17	1 0.02 0	0 0.00 0	243 3.98 65	87 1.81 29	11 0.31 5	2.0 0.03 0	0.1	0.08	17	393 354	
05S/08W-31K01S 10/06/67 1045	30	3102	82 7.4	1550	113 5.64 35	52 4.28 26	144 6.26 38	4 0.10 1	0 0.00 0	301 4.93 30	329 6.85 42	154 4.34 27	10.0 0.16 1	--	0.09	52	1080 1007	
03/19/68	30	5102	-- 7.8	1640	--	--	--	--	0 0.00	325 5.33	--	150 4.23	11.0 0.18	--	--	--	--	
05S/08W-32L01S 10/06/67 1000	30	3102	84 7.4	1820	134 6.69 34	58 4.77 24	188 8.18 41	4 0.10 0	0 0.00 0	303 4.97 25	464 9.66 49	171 4.82 24	13.0 0.21 1	0.5	0.15	52	1320 1234	
03/26/68	30	5102	84 7.3	1820	--	--	--	--	0 0.00	311 5.10	--	180 5.08	14.0 0.22	--	--	--	--	
05S/09W-14O02S 10/06/67 900	30	3102	-- 7.4	1780	--	--	--	--	0 0.00	291 4.77	397 8.26	177 4.99	37.0 0.60	--	--	--	--	
04/03/68 1115	30	5102	-- 7.6	1990	133 6.64 33	40 3.29 16	238 10.35 51	4 0.10 0	0 0.00 0	269 4.41 21	510 10.62 50	198 5.58 26	27.0 0.43 2	0.2	0.21	43	1400 1326	
05S/09W-15J01S 10/27/67 930	30	3102	-- 7.5	925	--	--	--	--	0 0.00	235 3.85	122 2.54	87 2.45	19.0 0.31	--	--	--	--	
03/18/68	30	5102	78 7.4	1020	99 4.94 47	26 2.14 21	75 3.26 31	2 0.05 0	0 0.00 0	229 3.75 37	143 2.98 29	108 3.04 30	25.0 0.40 4	0.3	0.05	29	623 620	
05S/09W-21B01S 10/06/67 1400	30	3102	74 7.6	1070	112 5.59 51	26 2.14 20	72 3.13 29	2 0.05 0	0 0.00 0	259 4.24 39	189 3.93 36	73 2.06 19	44.0 0.71 6	--	0.03	24	741 670	
03/19/68	30	5102	-- 7.9	862	82 4.09 45	23 1.89 21	69 3.00 33	1 0.02 0	0 0.00 0	242 3.97 44	154 3.21 35	53 1.49 16	25.0 0.40 4	0.2	0.04	23	556 550	

TABLE E-1

MINERAL ANALYSES OF GROUND WATER

SOUTHERN CALIFORNIA

WELL NO. DATE	COUNTY	LAB SAMPLER	TEMP PH	EC	MINERAL CONSTITUENTS IN				MILLIGRAMS PER LITER MILLIEQUIVALENTS PER LITER PERCENT REACTANCE VALUES				MILLIGRAMS PER LITER				TDS 180C (*105C) SUM	TH NCH
					CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SI02		
SANTA ANA R HYDRO SUBUNIT Y01A0					SANTA ANA RIVER HYDRO UNIT Y0100													
EAST COASTAL PLAIN HYDRO SUBAREA Y01A1																		
S/09W-25E01S 3/26/68	30	5102	80 7.6	1140	--	--	--	--	0 0.00	371 6.08	--	65 1.83	5.0 0.08	--	--	--	--	--
S/09W-25E04S 0/06/67	30	3102	-- 7.6	2260	129 6.44 26	84 6.91 28	255 11.09 45	2 0.05 0	0 0.00 0	449 7.36 29	501 10.43 42	211 5.95 24	77.0 1.24 5	0.7	0.29	34	1600 1515	668 299
3/19/68	30	5102	-- 7.6	2210	--	--	--	--	0 0.00	470 7.70	--	211 5.95	79.0 1.27	--	--	--	--	--
S/09W-32A01S 0/06/67	30	3102	84 8.4	442	--	--	--	--	0 0.00	174 2.85	--	13 0.37	0.2 0.00	--	--	--	--	--
3/19/68	30	5102	-- 8.8	407	--	--	--	--	15 0.50	107 1.75	--	18 0.51	--	--	--	--	--	--
S/09W-34J01S 4/22/68	30	5102	-- 7.5	771	43 2.14 29	10 0.82 11	102 4.44 59	3 0.08 1	0 0.00 0	249 4.08 53	90 1.87 24	61 1.72 22	0.0 0.00 0	0.3	0.20	54	491 486	148 0
S/09W-34J02S 0/06/67	30	3102	-- 7.8	1230	--	--	--	--	0 0.00	359 5.88	--	71 2.00	0.3 0.00	--	--	--	--	--
3/19/68	30	5102	-- 7.9	1220	--	--	--	--	0 0.00	371 6.08	--	76 2.14	--	--	--	--	--	--
S/09W-34Q01S 0/06/67	30	3102	86 7.7	959	39 1.95 22	8 0.66 7	140 6.09 69	3 0.08 1	0 0.00 0	207 3.39 39	51 1.06 12	150 4.23 49	0.3 0.00 0	0.3	0.25	44	564 538	130 0
3/19/68	30	5102	86 7.7	942	--	--	--	--	0 0.00	214 3.51	--	154 4.34	--	--	--	--	--	--
S/09W-36B01S 0/06/67	30	3102	81 7.5	1640	113 5.64 32	49 4.03 23	174 7.57 44	4 0.10 1	0 0.00 0	335 5.49 32	326 6.79 40	160 4.51 26	13.0 0.21 1	0.3	0.13	48	1090 1053	484 209
3/18/68	30	5102	-- 7.8	2160	174 8.68 36	80 6.58 27	208 9.05 37	3 0.08 0	0 0.00 0	376 6.16 25	466 9.70 40	266 7.50 31	65.0 1.05 4	0.4	0.21	37	1520 1485	764 455
S/10W-02R02S 0/25/67	30	3102	-- 7.4	1050	--	--	--	--	0 0.00	363 5.95	101 2.10	76 2.14	44.0 0.71	--	--	--	--	--
3/11/68	30	5102	-- 7.4	1070	--	--	--	--	0 0.00	366 6.00	112 2.33	82 2.31	46.0 0.74	--	--	--	--	--
S/10W-13R03S 6/04/68	30	5050	70 8.1	618	62 3.09 49	16 1.31 21	41 1.78 29	2 0.05 1	0 0.00 0	217 3.56 59	69 1.44 24	32 0.90 15	10.0 0.16 3	0.3	0.10	--	353 340	221 43
S/10W-22E03S 6/04/68	30	5050	-- 7.9	638	73 3.64 56	14 1.15 18	37 1.61 25	2 0.05 1	0 0.00 0	247 4.05 64	65 1.35 21	31 0.87 14	3.6 0.06 1	0.5	0.00	--	348 348	240 37
S/10W-28H02S 6/04/68	30	5050	67 8.0	888	108 5.39 59	20 1.64 18	48 2.09 23	2 0.05 1	0 0.00 0	246 4.03 45	159 3.31 37	56 1.58 18	1.9 0.03 0	0.5	0.10	--	577 517	352 150
S/10W-29P04S 6/04/68	30	5050	-- 8.0	1040	127 6.34 59	23 1.89 17	57 2.48 23	4 0.10 1	0 0.00 0	363 5.95 55	137 2.85 26	69 1.94 18	1.6 0.02 0	0.4	0.10	--	638 598	412 114
S/10W-32J01S 6/04/68	30	5050	-- 8.0	428	38 1.90 44	9 0.74 17	38 1.65 38	2 0.05 1	0 0.00 0	190 3.11 74	35 0.73 17	12 0.34 8	0.1 0.00 0	0.3	0.00	--	234 228	132 0
S/10W-33001S 6/04/68	30	5050	-- 8.1	751	87 4.34 58	16 1.31 18	40 1.74 23	3 0.08 1	0 0.00 0	257 4.21 57	87 1.81 24	46 1.30 17	5.9 0.09 1	0.5	0.10	--	355 412	283 72
S/11W-07C01S 6/04/68	30	5050	-- 8.3	424	41 2.04 48	6 0.49 12	38 1.65 39	2 0.05 1	0 0.00 0	187 3.06 74	35 0.73 18	12 0.34 8	0.1 0.00 0	0.4	0.10	--	228 227	127 0
S/11W-07L01S 6/04/68	30	5050	70 8.1	437	39 1.95 44	8 0.66 15	40 1.74 40	2 0.05 1	0 0.00 0	194 3.18 75	35 0.73 17	12 0.34 8	0.0 0.00 0	0.4	0.10	--	229 232	130 0
S/11W-08C01S 6/04/68	30	5050	76 8.4	395	19 0.95 25	2 0.16 4	62 2.70 70	1 0.02 1	5 0.17 4	163 2.67 69	34 0.71 18	12 0.34 9	0.0 0.00 0	0.4	0.00	--	214 216	56 0
S/11W-14A04S 6/04/68	30	5050	-- 8.1	758	89 4.44 56	18 1.48 19	43 1.87 24	4 0.10 1	0 0.00 0	275 4.51 59	102 2.12 28	36 1.01 13	0.1 0.00 0	0.5	0.10	--	433 428	296 71
S/11W-14A09S 6/04/68	30	5050	-- 8.2	777	90 4.49 56	18 1.48 18	44 1.91 24	4 0.10 1	0 0.00 0	280 4.59 58	105 2.19 28	39 1.10 14	0.5 0.01 0	0.5	0.10	--	432 439	299 69

TABLE E-1

MINERAL ANALYSES OF GROUND WATER

SOUTHERN CALIFORNIA

STATE WELL NO. DATE	COUNTY	LAB SAMPLER	TEMP PH	EC	MINERAL CONSTITUENTS IN								MILLIGRAMS PER LITER MILLIEQUIVALENTS PER LITER PERCENT REACTANCE VALUES				TDS 180C (*105C) SUM	NO
					CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SI02		
LOWER SANTA ANA R HYDRO SUBUNIT Y01A0 EAST COASTAL PLAIN HYDRO SUBAREA Y01A1					SANTA ANA RIVER HYDRO UNIT								Y0100					
05S/11W-20G01S 06/04/68 --	30	5050	-- 8.3	486	55 2.74 58	6 0.49 10	32 1.39 30	3 0.08 2	0 0.00 0	222 3.64 77	43 0.89 19	7 0.20 4	0.1 0.00 0	0.6	0.20	--	245 257	16
05S/11W-20J04S 06/04/68 --	30	5050	-- 8.3	577	66 3.29 58	9 0.74 13	37 1.61 28	3 0.08 1	0 0.00 0	210 3.44 59	68 1.41 24	34 0.96 16	2.2 0.03 1	0.5	0.10	--	296 324	20
05S/11W-20K09S 06/04/68 --	30	5050	-- 8.4	447	45 2.24 50	7 0.57 13	36 1.56 35	3 0.08 2	6 0.20 5	186 3.05 70	36 0.75 17	13 0.37 8	0.2 0.00 0	0.5	0.00	--	254 239	14
05S/11W-20004S 06/04/68 --	30	5050	-- 8.3	1820	208 10.38 63	25 2.05 12	92 4.00 24	5 0.13 1	0 0.00 0	182 2.98 18	70 1.46 9	435 12.27 73	0.0 0.00 0	0.4	0.10	--	1450 925	62 47
05S/11W-20013S 06/04/68 --	30	5050	-- 8.2	818	92 4.59 27	126 10.36 60	48 2.09 12	3 0.08 0	0 0.00 0	202 3.31 43	45 0.94 12	120 3.38 44	0.0 0.00 0	0.4	0.10	--	453 534*	74 56
05S/11W-20R02S 06/04/68 --	30	5050	-- 8.4	624	52 2.59 42	8 0.66 11	64 2.78 45	3 0.08 1	3 0.10 2	190 3.11 49	100 2.08 33	36 1.01 16	0.2 0.00 0	0.4	0.10	--	338 361	16
05S/11W-21M03S 06/04/68 --	30	5050	-- 8.5	405	30 1.50 38	1 0.08 2	53 2.30 59	2 0.05 1	3 0.10 3	160 2.62 67	36 0.75 19	15 0.42 11	0.0 0.00 0	0.4	0.00	--	214 220	7
05S/11W-21N02S 06/06/68 --	30	5050	-- 8.5	692	76 3.79 54	12 0.99 14	50 2.17 31	2 0.05 1	6 0.20 3	192 3.15 45	147 3.06 44	19 0.53 8	0.1 0.00 0	0.4	0.00	--	404 407	23 7
05S/11W-21Q05S 06/06/68 --	30	5050	-- 8.5	860	93 4.64 55	19 1.56 18	50 2.17 26	4 0.10 1	6 0.20 2	204 3.34 40	114 2.37 28	79 2.23 27	12.0 0.19 2	0.4	0.10	--	531 478	31 12
05S/11W-23M01S 06/06/68 --	30	5050	-- 8.4	874	108 5.39 59	20 1.64 18	47 2.04 22	4 0.10 1	5 0.17 2	236 3.87 43	194 4.04 45	32 0.90 10	2.2 0.03 0	0.4	0.10	--	594 529	35 15
05S/11W-23R01S 06/06/68 --	30	5050	-- 8.1	468	52 2.59 54	9 0.74 15	31 1.35 28	3 0.08 2	0 0.00 0	206 3.38 74	38 0.79 17	14 0.39 9	1.7 0.03 1	0.6	0.00	--	250 251	16
05S/11W-26E05S 06/06/68 --	30	5050	-- 8.6	376	13 0.65 18	1 0.08 2	65 2.83 79	1 0.02 1	4 0.13 4	149 2.44 68	31 0.64 18	12 0.34 9	1.0 0.02 0	0.5	0.10	--	207 202	
05S/11W-26M07S 06/06/68 1000	30	5050	78 8.4	407	7 0.35 9	1 0.08 2	81 3.52 88	1 0.02 1	2 0.07 2	198 3.24 84	4 0.08 2	16 0.45 12	0.3 0.00 0	0.7	0.20	--	241 211	
05S/11W-26P01S 06/06/68 --	30	5050	-- 8.7	387	4 0.20 5	1 0.08 2	76 3.30 91	1 0.02 1	5 0.17 5	150 2.46 68	31 0.64 18	12 0.34 9	0.1 0.00 0	0.5	0.10	--	224 205	
05S/11W-26P03S 06/06/68 1100	30	5050	79 8.4	401	6 0.30 8	1 0.08 2	80 3.48 89	1 0.02 1	2 0.07 2	182 2.98 77	21 0.44 11	13 0.37 9	0.2 0.00 0	0.7	0.20	--	233 215	
05S/11W-27F05S 06/06/68 --	30	5050	-- 8.5	602	66 3.29 53	13 1.07 17	40 1.74 28	3 0.08 1	5 0.17 3	208 3.41 56	96 2.00 33	16 0.45 7	0.2 0.00 0	0.5	0.10	--	328 343	21
05S/11W-27M04S 06/06/68 --	30	5050	-- 8.4	541	57 2.84 52	11 0.90 17	37 1.61 30	3 0.08 1	2 0.07 1	206 3.38 64	53 1.10 21	25 0.70 13	2.9 0.05 1	0.6	0.10	--	276 293	18
05S/11W-28D04S 06/06/68 --	30	5050	-- 8.0	1130	132 6.59 53	46 3.78 30	47 2.04 16	4 0.10 1	0 0.00 0	229 3.75 30	396 8.24 66	18 0.51 4	0.1 0.00 0	0.2	0.00	--	882 756	51 37
05S/11W-29B11S 06/06/68 --	30	5050	-- 8.5	733	61 3.04 45	12 0.99 15	61 2.65 39	3 0.08 1	4 0.13 2	154 2.52 37	36 0.75 11	118 3.33 49	0.2 0.00 0	0.4	0.00	--	419 372	20
05S/11W-29C01S 06/06/68 --	30	5050	-- 8.6	366	8 0.40 11	1 0.08 2	70 3.04 86	1 0.02 1	5 0.17 5	167 2.74 78	5 0.10 3	17 0.48 14	0.5 0.01 0	0.6	0.10	--	210 191	
05S/11W-29C02S 06/06/68 --	30	5050	-- 8.5	363	8 0.40 11	1 0.08 2	71 3.09 86	1 0.02 1	2 0.07 2	173 2.83 81	5 0.10 3	17 0.48 14	1.6 0.02 1	0.7	0.10	--	208 193	
05S/11W-29M01S 06/06/68 --	30	5050	-- 8.4	365	9 0.45 13	1 0.08 2	69 3.00 84	1 0.02 1	3 0.10 3	172 2.82 80	10 0.21 6	14 0.39 11	0.7 0.01 0	0.6	0.10	--	208 193	
05S/11W-35F04S 06/06/68 --	30	5050	-- 8.7	379	12 0.60 17	1 0.08 2	66 2.87 80	1 0.02 1	5 0.17 5	166 2.72 75	18 0.37 10	13 0.37 10	0.6 0.01 0	0.6	0.10	--	212 199	

TABLE E-1
MINERAL ANALYSES OF GROUND WATER
SOUTHERN CALIFORNIA

WELL NO. DATE	COUNTY	LAB SAMPLER	TEMP PH	EC	MINERAL CONSTITUENTS IN										MILLIGRAMS PER LITER			TDS 180C (*105C) SUM	TH NCH
					CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SI02	MILLIEQUIVALENTS PER LITER PERCENT REACTANCE VALUES		
LOWER SANTA ANA R HYDRO SUBUNIT Y01A0 EAST COASTAL PLAIN HYDRO SUBAREA Y01A1																			
5S/11W-36B02S 06/06/68	30	5050	-- 8.3	561	63 3.14 55	12 0.99 17	34 1.48 26	3 0.08 1	0 0.00 0	234 3.83 69	52 1.08 19	22 0.62 11	1.3 0.02 0	0.6	0.00	--	275 303	207 15	
5S/11W-36C01S 06/06/68 1530	30	5050	68 8.4	544	60 2.99 54	12 0.99 18	33 1.43 26	3 0.08 1	3 0.10 2	214 3.51 65	54 1.12 21	21 0.59 11	1.7 0.03 0	0.6	0.00	--	279 294	199 19	
6S/08W-05E02S 10/06/67 1015	30	3102	-- 7.6	978	82 4.09 41	26 2.14 21	84 3.65 37	2 0.05 0	0 0.00 0	266 4.36 45	145 3.02 31	73 2.06 21	20.0 0.32 3	0.4	0.04	54	639 618	312 94	
03/19/68 --	30	5102	82 7.5	1070	87 4.34 38	31 2.55 22	106 4.61 40	2 0.05 0	0 0.00 0	293 4.80 42	198 4.12 36	82 2.31 20	10.0 0.16 1	0.4	0.11	50	711 711	345 104	
6S/08W-07Q01S 10/06/67 1035	30	3102	-- 7.5	1240	-- -- --	-- -- --	-- -- --	-- -- --	0 0.00 0	209 3.42 --	-- -- --	153 4.31 --	48.0 0.77 --	--	--	--	-- -- --	-- -- --	
03/19/68 --	30	5102	-- 7.4	1220	-- -- --	-- -- --	-- -- --	-- -- --	0 0.00 0	219 3.59 --	-- -- --	156 4.40 --	50.0 0.81 --	--	--	--	-- -- --	-- -- --	
6S/08W-17D02S 03/26/68 --	30	5102	-- 7.6	1210	81 4.04 34	16 1.31 11	148 6.44 54	3 0.08 1	0 0.00 0	214 3.51 30	142 2.96 25	164 4.62 39	44.0 0.71 6	0.4	0.04	50	775 754	268 93	
6S/09W-01L01S 10/06/67 1045	30	3102	78 7.3	1390	114 5.69 41	29 2.38 17	128 5.57 41	3 0.08 1	0 0.00 0	251 4.11 30	193 4.02 29	172 4.85 35	48.0 0.77 6	0.4	0.02	52	933 863	404 198	
6S/09W-02D01S 10/27/67 1000	30	3102	-- 7.4	807	51 2.54 33	11 0.90 12	98 4.26 55	3 0.08 1	0 0.00 0	216 3.54 46	82 1.71 22	86 2.42 32	0.4 0.01 0	0.3	0.18	56	524 495	173 0	
03/26/68 --	30	5102	83 7.6	833	54 2.69 32	12 0.99 12	104 4.52 54	4 0.10 1	0 0.00 0	213 3.49 43	80 1.66 21	104 2.93 36	0.6 0.01 0	0.3	0.15	54	514 518	184 9	
6S/09W-04L02S 10/06/67 1130	30	3102	-- 7.2	2790	-- -- --	-- -- --	-- -- --	-- -- --	0 0.00 0	297 4.87 --	-- -- --	379 10.69 --	74.0 1.19 --	--	--	--	-- -- --	-- -- --	
03/19/68 --	30	5102	-- 7.3	2713	-- -- --	-- -- --	-- -- --	-- -- --	0 0.00 0	299 4.90 --	-- -- --	406 11.45 --	68.0 1.10 --	--	--	--	-- -- --	-- -- --	
6S/09W-05A01S 10/06/67 1315	30	3102	89 8.5	535	15 0.75 15	3 0.25 5	90 3.91 79	2 0.05 1	5 0.17 3	180 2.95 59	37 0.77 15	38 1.07 22	0.4 0.01 0	0.6	0.18	19	307 299	50 0	
03/19/68 --	30	5102	-- 8.2	697	26 1.30 19	8 0.66 10	112 4.87 71	1 0.02 0	4 0.13 2	184 3.01 46	60 1.25 19	78 2.20 33	0.0 0.00 0	0.7	0.30	20	398 401	98 0	
6S/10W-01E02S 06/07/68 --	30	5050	72 9.2	370	1 0.05 1	1 0.08 2	77 3.35 95	1 0.02 1	15 0.50 14	149 2.44 69	2 0.04 1	19 0.53 15	0.1 0.00 0	0.1	0.10	--	193 190	7 0	
6S/10W-01E05S 10/27/67 1100	30	3102	-- 7.6	462	3 0.15 3	0 0.00 0	96 4.17 95	2 0.05 1	0 0.00 0	167 2.74 64	11 0.23 5	46 1.30 30	0.0 0.00 0	--	0.24	15	289 256	7 0	
03/19/68 --	30	5102	-- 7.8	462	4 0.20 4	0 0.00 0	103 4.48 96	0 0.00 0	0 0.00 0	168 2.75 62	12 0.25 6	52 1.47 33	0.0 0.00 0	0.9	0.21	16	262 271	10 0	
6S/10W-01L01S 10/27/67 1115	30	3102	-- 7.5	925	-- -- --	-- -- --	-- -- --	-- -- --	0 0.00 0	187 3.06 --	-- -- --	50 1.41 --	0.0 0.00 --	--	--	--	-- -- --	-- -- --	
03/19/68 --	30	5102	-- 7.9	925	-- -- --	-- -- --	-- -- --	-- -- --	0 0.00 0	188 3.08 --	-- -- --	53 1.49 --	-- -- --	--	--	--	-- -- --	-- -- --	
6S/10W-05B03S 06/07/68 --	30	5050	72 8.4	440	39 1.95 44	9 0.74 17	39 1.70 38	2 0.05 1	5 0.17 4	184 3.01 69	40 0.83 19	13 0.37 8	0.0 0.00 0	0.3	0.00	--	228 238	134 0	
6S/10W-06B02S 06/07/68 --	30	5050	-- 8.4	568	63 3.14 55	12 0.99 17	36 1.56 27	2 0.05 1	2 0.07 1	233 3.82 67	57 1.19 21	21 0.59 10	0.0 0.00 0	0.5	0.00	--	289 309	207 12	
6S/10W-11G03S 10/27/67 1045	30	3102	-- 8.5	384	-- -- --	-- -- --	-- -- --	-- -- --	19 0.63 --	157 2.57 --	-- -- --	16 0.45 --	0.0 0.00 --	--	--	--	-- -- --	-- -- --	
03/29/68 900	30	5102	-- 8.7	391	-- -- --	-- -- --	-- -- --	-- -- --	14 0.47 --	166 2.72 --	-- -- --	19 0.53 --	0.0 0.00 --	--	--	--	-- -- --	-- -- --	
6S/11W-03R02S 06/07/68 --	30	5050	-- 8.2	452	9 0.45 11	2 0.16 4	82 3.57 85	1 0.02 1	0 0.00 0	178 2.92 69	12 0.25 6	38 1.07 25	0.1 0.00 0	0.7	0.20	--	258 233	31 0	
6S/11W-12E03S 06/07/68 --	30	5050	-- 8.5	761	59 2.94 39	17 1.40 19	70 3.04 41	3 0.08 1	4 0.13 2	170 2.79 37	150 3.12 42	49 1.38 19	1.1 0.02 0	0.4	0.10	--	475 438	217 71	

TABLE E-1

MINERAL ANALYSES OF GROUND WATER

SOUTHERN CALIFORNIA

STATE WELL NO. DATE	COUNTY TIME	LAB SAMPLER	TEMP PH	EC	MILLIGRAMS PER LITER MILLIEQUIVALENTS PER LITER PERCENT REACTION VALUES										MILLIGRAMS PER LITER				TDS 180C (*105C) SUM
					MINERAL CONSTITUENTS IN				CO3	HCO3	SO4	CL	NO3	F	B	SI02			
					CA	MG	NA	K											
LOWER SANTA ANA R HYDRO SUBUNIT Y01A0 EAST COASTAL PLAIN HYDRO SUBAREA Y01A1					SANTA ANA RIVER HYDRO UNIT Y0100														
06S/11W-13F04S 06/07/68	30	5050	-- 8.1	14400	677 33.78 24	238 19.57 14	2010 87.43 62	39 1.00 1	0 0.00 0	404 6.62 5	10 0.21 0	4780 134.80 95	0.2 0.00 0	0.1	2.10	--	8520 7955	26 23	
SANTIAGO HYDRO SUBAREA Y01A2																			
05S/07W-29E01S 10/03/67	30	3102	-- 7.5	917	124 6.19 60	31 2.55 25	33 1.43 14	2 0.05 0	0 0.00 0	376 6.16 62	147 3.06 31	26 0.73 7	1.1 0.02 0	0.1	0.11	23	618 573	4 1	
05S/08W-01N01S 10/03/67	30	3102	-- 7.6	1270	--	--	--	--	0 0.00	251 4.11	--	46 1.30	--	--	--	--	--	--	
03/14/68	30	5102	-- 7.6	1290	--	--	--	--	0 0.00	273 4.47	--	47 1.32	0.0 0.00	--	--	--	--	--	
09/24/68	30	3102	-- 7.4	1270	105 5.24 39	26 2.14 16	140 6.09 45	2 0.05 0	0 0.00 0	277 4.54 33	385 8.01 58	41 1.16 8	1.3 0.02 0	0.6	0.13	15	874 853	3 1	
SANTA ANA NARROWS HYDRO SUBAREA Y01A3																			
03S/08W-25J01S 10/03/67	30	3102	-- 7.7	1670	--	--	--	--	0 0.00	368 6.03	379 7.89	154 4.34	--	--	--	--	--	--	
03/14/68	30	5102	-- 7.8	1700	--	--	--	--	0 0.00	389 6.37	395 8.22	156 4.40	0.0 0.00	--	--	--	--	--	
09/27/68	30	3102	-- 7.6	1820	191 9.53 47	49 4.03 20	148 6.44 32	5 0.13 1	0 0.00 0	400 6.55 33	430 8.95 44	163 4.60 23	0.5 0.01 0	0.6	0.24	22	1290 1206	6 3	
03S/08W-31E02S 10/03/67	30	3102	-- 7.5	1210	--	--	--	--	0 0.00	190 3.11	303 6.31	100 2.82	--	--	--	--	--	--	
03/14/68	30	5102	-- 7.6	1180	--	--	--	--	0 0.00	189 3.10	309 6.43	102 2.88	3.0 0.05	--	--	--	--	--	
09/27/68	30	3102	-- 7.6	1230	103 5.14 41	30 2.47 20	112 4.87 39	4 0.10 1	0 0.00 0	190 3.11 25	296 6.16 50	103 2.90 24	4.2 0.07 0	0.4	0.12	16	817 763	3 2	
03S/08W-33K02S 03/14/68	30	5102	-- 7.3	1720	--	--	--	--	0 0.00	385 6.31	477 9.93	130 3.67	2.0 0.03	--	--	--	--	--	
09/27/68	30	3102	-- 7.1	1750	--	--	--	--	0 0.00	374 6.13	478 9.95	130 3.67	4.5 0.07	--	--	--	--	--	
03S/08W-34F01S 10/03/67	30	3102	-- 7.3	1640	--	--	--	--	0 0.00	363 5.95	398 8.29	135 3.81	--	--	--	--	--	--	
03/14/68	30	5102	-- 7.4	1700	--	--	--	--	0 0.00	369 6.05	--	144 4.06	7.0 0.11	--	--	--	--	--	
09/27/68	30	3102	68 7.3	1720	199 9.93 52	47 3.86 20	120 5.22 27	5 0.13 1	0 0.00 0	369 6.05 31	441 9.18 47	141 3.98 21	8.0 0.13 1	0.7	0.20	22	1240 1166	6 3	
03S/09W-36F01S 08/20/68	30	3102	-- 7.4	2610	264 13.17 43	98 8.06 26	205 8.92 29	8 0.20 1	0 0.00 0	344 5.64 18	819 17.05 56	246 6.94 23	50.0 0.81 3	--	0.12	--	2017 1860	10 7	
04S/09W-01C01S 10/03/67	30	3102	-- 7.6	1520	159 7.93 48	44 3.62 22	107 4.65 28	6 0.15 1	0 0.00 0	313 5.13 31	354 7.37 45	139 3.92 24	0.9 0.01 0	0.6	0.09	14	1080 979	5 3	
03/14/68	30	5102	-- 7.8	1700	176 8.78 47	49 4.03 21	132 5.74 31	6 0.15 1	0 0.00 0	317 5.19 28	394 8.20 44	174 4.91 26	19.0 0.31 2	0.5	0.11	13	1180 1120	6 3	
09/27/68	30	3102	-- 7.4	1500	155 7.73 48	40 3.29 20	116 5.04 31	5 0.13 1	0 0.00 0	304 4.98 31	343 7.14 44	140 3.95 24	8.0 0.13 1	0.7	0.11	16	1033 974	5 3	
MIDDLE SANTA ANA RIV HYDR SUBUNITY0180 CHINO HYDRO SUBAREA Y01B1																			
05S/01E-05M02S 10/06/67	33	4103	-- 8.3	269	2 0.10 4	0 0.00 0	51 2.22 89	7 0.18 7	0 0.00 0	117 1.92 76	12 0.25 10	13 0.37 14	0.0 0.00 0	0.2	0.09	--	148 143		
01S/05W-15G01S 12/01/67	36	5100	-- 8.1	423	63 3.14 70	7 0.57 13	16 0.69 16	2 0.05 1	0 0.00 0	193 3.16 69	27 0.56 12	13 0.37 8	30.0 0.48 11	0.2	0.03	--	287 254	1	
06/24/68	36	5100	-- 7.9	435	66 3.29 71	7 0.57 12	16 0.69 15	2 0.05 1	0 0.00 0	193 3.16 69	23 0.48 10	15 0.42 9	30.0 0.48 11	0.3	0.01	--	235 255	1	
01S/05W-16J01S 12/01/67	36	5100	-- 8.2	435	65 3.24 72	6 0.49 11	17 0.74 16	2 0.05 1	0 0.00 0	186 3.05 67	30 0.62 14	10 0.28 6	37.0 0.60 13	0.2	0.03	--	283 259	1	

TABLE E-1

MINERAL ANALYSES OF GROUND WATER

SOUTHERN CALIFORNIA

STATE WELL NO. DATE	COUNTY	LAB SAMPLER	TEMP PH	EC	MILLIGRAMS PER LITER MINERAL CONSTITUENTS IN MILLIEQUIVALENTS PER LITER PERCENT REACTANCE VALUES										MILLIGRAMS PER LITER					TDS 180C (*105C) SUM	TH NCH
					CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SI02					
MIDDLE SANTA ANA RIV HYDR SUBUNITY0180 CHINO HYDRO SUBAREA Y0181																					
01S/05W-20D01S 06/24/68	36	5100	-- 7.6	420	61 3.04 71	6 0.49 11	16 0.69 16	2 0.05 1	0 0.00 0	182 2.98 72	7 0.14 3	19 0.53 13	31.0 0.50 12	0.3	0.00	--	231 232	177 28			
01S/05W-21801S 06/24/68	36	5100	-- 7.8	443	69 3.44 74	6 0.49 11	15 0.65 14	2 0.05 1	0 0.00 0	193 3.16 69	24 0.50 11	13 0.37 8	35.0 0.56 12	0.3	0.00	--	240 260	197 39			
01S/06W-11801S 11/21/67	36	5100	-- 8.1	336	49 2.44 67	8 0.66 18	11 0.48 13	2 0.05 1	0 0.00 0	195 3.20 86	15 0.31 8	6 0.17 4	3.4 0.05 1	0.3	0.03	--	196 191	155 0			
05/23/68	36	5100	-- 8.2	333	53 2.64 72	7 0.57 16	9 0.39 11	2 0.05 1	0 0.00 0	178 2.92 82	18 0.37 11	7 0.20 6	3.2 0.05 1	0.4	0.00	--	189 188	161 15			
01S/06W-11N01S 11/21/67	36	5100	-- 8.1	333	50 2.49 69	9 0.74 20	8 0.35 10	2 0.05 1	0 0.00 0	183 3.00 80	22 0.46 12	8 0.22 6	2.8 0.04 1	0.4	0.01	--	182 193	162 12			
05/23/68	36	5100	-- 8.1	356	52 2.59 68	7 0.57 15	14 0.61 16	2 0.05 1	0 0.00 0	195 3.20 84	12 0.25 6	10 0.28 7	5.7 0.09 2	0.3	0.03	--	211 199	159 0			
01S/06W-12P01S 11/21/67	36	5100	-- 7.9	347	54 2.69 71	8 0.66 17	8 0.35 9	3 0.08 2	0 0.00 0	188 3.08 82	22 0.46 12	6 0.17 4	2.5 0.04 1	0.3	0.02	--	183 197	168 14			
01S/06W-16A01S 03/18/68 1100	36	5050	-- 7.7	336	43 2.14 58	9 0.74 20	17 0.74 20	2 0.05 1	-- 2.93 82	9 0.19 5	13 0.37 10	6.5 0.10 3	0.1	0.00	--	213 188	144 0				
09/05/68 830	36	5050	-- 7.4	339	42 2.09 58	9 0.74 20	17 0.74 20	1 0.02 1	-- 2.93 81	12 0.25 7	13 0.37 10	5.0 0.08 2	0.3	0.00	--	220 188	142 0				
01S/06W-16L01S 11/21/67	36	5100	-- 8.1	312	38 1.90 56	9 0.74 22	16 0.69 21	2 0.05 1	0 0.00 0	168 2.75 82	10 0.21 6	8 0.22 7	10.0 0.16 5	0.2	0.00	--	164 176	132 0			
05/24/68	36	5100	-- 8.2	392	35 1.75 43	12 0.99 24	29 1.26 31	4 0.10 2	0 0.00 0	164 2.69 67	34 0.71 18	19 0.53 13	3.8 0.06 1	0.9	0.05	--	237 219	137 2			
01S/06W-21P01S 03/21/68 1135	36	5050	-- 7.7	1263	203 10.13 73	26 2.14 15	33 1.43 10	3 0.08 1	-- 3.98 29	241 5.02 37	154 4.34 32	15.0 0.24 2	0.1	0.01	--	1028 795	614 415				
09/05/68 815	36	5050	-- 7.6	360	41 2.04 52	12 0.99 25	19 0.83 21	2 0.05 1	-- 3.26 82	10 0.21 5	12 0.34 9	9.0 0.14 4	0.3	0.00	--	219 204	152 0				
01S/06W-35A01S 11/21/67	36	5100	-- 8.0	346	55 2.74 72	8 0.66 17	8 0.35 9	2 0.05 1	0 0.00 0	190 3.11 83	22 0.46 12	5 0.14 4	2.8 0.04 1	0.3	0.01	--	430 197	170 14			
05/24/68	36	5100	-- 8.3	353	51 2.54 66	7 0.57 15	15 0.65 17	2 0.05 1	0 0.00 0	188 3.08 79	15 0.31 8	12 0.34 9	9.3 0.15 4	0.3	0.01	--	198 204	156 2			
01S/07W-08N01S 11/21/67	36	5100	-- 7.9	347	49 2.44 66	8 0.66 18	13 0.56 15	2 0.05 1	0 0.00 0	193 3.16 82	11 0.23 6	9 0.25 7	12.0 0.19 5	0.4	0.03	--	213 200	155 0			
05/24/68	36	5100	-- 8.0	346	49 2.44 66	8 0.66 18	13 0.56 15	1 0.02 1	0 0.00 0	183 3.00 79	15 0.31 8	11 0.31 8	11.0 0.18 5	0.4	0.02	--	219 199	155 5			
01S/07W-20A01S 11/21/67	36	5100	-- 8.0	499	66 3.29 64	13 1.07 21	16 0.69 14	2 0.05 1	0 0.00 0	178 2.92 58	37 0.77 15	11 0.31 6	66.0 1.06 21	0.5	0.00	--	291 299	218 72			
05/24/68	36	5100	-- 8.0	362	44 2.19 56	9 0.74 19	22 0.96 24	2 0.05 1	0 0.00 0	171 2.80 71	33 0.69 17	12 0.34 8	8.8 0.14 4	0.3	0.01	--	219 216	147 7			
01S/07W-23D01S 11/21/67	36	5100	-- 8.1	374	47 2.34 59	10 0.82 21	17 0.74 19	2 0.05 1	0 0.00 0	200 3.26 81	10 0.21 5	10 0.28 7	17.0 0.27 7	0.1	0.00	--	213 212	158 0			
01S/07W-30Q01S 11/21/67	36	5100	-- 7.6	360	46 2.29 59	11 0.90 23	14 0.61 16	2 0.05 1	0 0.00 0	188 3.08 79	8 0.17 4	14 0.39 10	17.0 0.27 7	0.3	0.02	--	224 205	160 6			
01S/07W-34K01S 10/25/67	36	5100	-- 7.9	369	36 1.80 45	17 1.40 35	17 0.74 19	2 0.05 1	0 0.00 0	198 3.24 83	8 0.17 4	11 0.31 8	11.3 0.18 5	0.3	0.00	--	240 200	160 0			
05/22/68	36	5100	-- 6.7	619	82 4.09 62	17 1.40 21	23 1 15	2 0.05 1	0 0.00 0	227 3.72 58	32 0.67 10	42 1.18 18	51.0 0.82 13	0.4	0.05	--	404 362	275 88			

TABLE E-1
MINERAL ANALYSES OF GROUND WATER
SOUTHERN CALIFORNIA

STATE WELL NO. DATE	COUNTY TIME	LAB SAMPLER	TEMP PH	EC	MINERAL CONSTITUENTS IN				MILLIGRAMS PER LITER MILLIEQUIVALENTS PER LITER PERCENT REACTANCE VALUES				MILLIGRAMS PER LITER				TDS 180C (*105C) SUM	T NC
					CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SI02		
MIDDLE SANTA ANA RIV HYDR SUBUNITY0180 CHINO HYDRO SUBAREA																		
Y0181																		
01S/08W-08H01S 07/18/68	70	5868	81 7.7	555	131 6.54 73	18 1.48 16	20 0.87 10	3 0.08 1	--	193 3.16 36	117 2.43 27	33 0.93 10	146.0 2.35 26	0.0	0.07	23	650 586	40 24
01S/08W-10N01S 10/23/67	70	1101	70 8.5	654	58 2.89 42	15 1.23 18	62 2.70 39	2 0.05 1	0	148 2.42 36	140 2.91 43	42 1.18 18	13.7 0.22 3	--	--	0	480 406	20 8
08/26/68	70	1101	72 7.8	289	28 1.40 47	3 0.25 8	30 1.30 44	1 0.02 1	0	137 2.24 78	19 0.39 14	5 0.14 5	6.2 0.10 3	0.1	--	0	229 160	8
01S/08W-14A01S 11/20/67	36	5100	-- 8.0	463	57 2.84 59	14 1.15 24	17 0.74 15	2 0.05 1	0	181 2.97 62	30 0.62 13	9 0.25 5	58.0 0.93 20	0.2	0.00	--	259 277	20 5
05/24/68	36	5100	-- 7.6	459	60 2.99 61	14 1.15 23	16 0.69 14	2 0.05 1	0	181 2.97 59	30 0.62 12	15 0.42 8	60.0 0.97 19	0.3	0.01	--	290 287	20 5
01S/08W-14A03S 10/11/67	36	5100	-- 7.5	459	57 2.84 60	14 1.15 24	16 0.69 15	2 0.05 1	0	178 2.92 63	26 0.54 12	9 0.25 5	56.0 0.90 20	0.3	0.05	--	326 268	19 5
11/08/67	36	5100	-- 7.4	460	57 2.84 60	14 1.15 24	16 0.69 15	2 0.05 1	0	181 2.97 62	30 0.62 13	10 0.28 6	57.0 0.92 19	0.3	0.01	--	287 276	20 5
03/21/68	36	5100	-- 7.5	451	58 2.89 59	15 1.23 25	16 0.69 14	2 0.05 1	0	183 3.00 62	28 0.58 12	10 0.28 6	58.0 0.93 19	0.3	0.01	--	273 278	20 5
04/24/68	36	5100	-- 7.8	471	58 2.89 60	14 1.15 24	16 0.69 14	2 0.05 1	0	178 2.92 62	28 0.58 12	9 0.25 5	59.0 0.95 20	0.4	0.00	--	282 274	20 5
01S/08W-15J01S 10/11/67	36	5100	-- 7.7	387	54 2.69 64	10 0.82 20	14 0.61 15	2 0.05 1	0	173 2.83 68	22 0.46 11	15 0.42 10	28.0 0.45 11	0.3	0.02	--	283 231	17 3
11/08/67	36	5100	-- 7.4	390	52 2.59 63	11 0.90 22	14 0.61 15	1 0.02 1	0	178 2.92 70	27 0.56 13	9 0.25 6	27.0 0.43 10	0.2	0.02	--	256 229	17 2
02/01/68	36	5100	-- 8.1	370	58 2.89 65	11 0.90 20	13 0.56 13	2 0.05 1	0	178 2.92 66	30 0.62 14	10 0.28 6	35.0 0.56 13	0.3	0.02	--	214 247	19 4
03/21/68	36	5100	-- 7.4	407	57 2.84 65	11 0.90 21	13 0.56 13	2 0.05 1	0	173 2.83 65	29 0.60 14	9 0.25 6	42.0 0.68 15	0.2	0.00	--	250 249	18 4
04/24/68	36	5100	-- 8.1	434	60 2.99 66	11 0.90 20	13 0.56 12	2 0.05 1	0	173 2.83 64	32 0.67 15	12 0.34 8	37.0 0.60 13	0.3	0.00	--	149 253	19 5
01S/08W-15P02S 10/11/67	36	5100	-- 7.8	398	55 2.74 64	9 0.74 17	17 0.74 17	2 0.05 1	0	183 3.00 72	22 0.46 11	10 0.28 7	28.0 0.45 11	0.2	0.03	--	348 234	17 2
11/08/67	36	5100	-- 7.4	397	52 2.59 61	11 0.90 21	16 0.69 16	1 0.02 1	0	183 3.00 72	25 0.52 13	7 0.20 5	26.0 0.42 10	0.2	0.04	--	279 229	17 2
01S/08W-23A03S 10/11/67	36	5100	-- 7.7	524	--	--	--	--	--	--	32 0.67	--	--	--	--	--	448 --	-- --
11/08/67	36	5100	-- 7.4	524	71 3.54 67	14 1.15 22	13 0.56 11	2 0.05 1	0	183 3.00 56	35 0.73 14	12 0.34 6	77.0 1.24 23	0.3	0.03	--	348 315	23 8
03/21/68	36	5100	-- 7.6	540	74 3.69 69	13 1.07 20	13 0.56 10	2 0.05 1	0	183 3.00 54	36 0.75 14	15 0.42 8	84.0 1.35 24	0.3	0.00	--	329 328	23 8
04/24/68	36	5100	-- 7.8	541	74 3.69 66	16 1.31 23	13 0.56 10	2 0.05 1	0	183 3.00 56	32 0.67 12	12 0.34 6	86.0 1.39 26	0.4	0.00	--	342 326	25 10
01S/08W-24E01S 10/11/67	36	5100	-- 7.6	528	73 3.64 67	14 1.15 21	13 0.56 10	2 0.05 1	0	181 2.97 55	29 0.60 11	17 0.48 9	81.0 1.31 24	0.3	0.02	--	375 319	24 9
04/24/68	36	5100	-- 7.9	539	74 3.69 67	15 1.23 22	13 0.56 10	2 0.05 1	0	178 2.92 54	32 0.67 12	15 0.42 8	86.0 1.39 26	0.3	0.02	--	337 325	24 10
01S/08W-25Q01S 10/11/67	36	5100	-- 7.8	360	40 1.99 53	10 0.82 22	21 0.91 24	2 0.05 1	0	188 3.08 82	5 0.10 3	10 0.28 7	17.5 0.28 7	0.3	0.03	--	302 199	14

TABLE E-1

MINERAL ANALYSES OF GROUND WATER

SOUTHERN CALIFORNIA

STATE	WELL NO.	COUNTY	LAB DATE	TEMP SAMPLER PH	EC	MINERAL CONSTITUENTS IN				MILLIGRAMS PER LITER MILLIEQUIVALENTS PER LITER PERCENT REACTANCE VALUES				MILLIGRAMS PER LITER				TDS 180C (*105C) SUM	TH NCH	
						CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SI02			
MIDDLE SANTA ANA RIV HYDR SUBUNITY0180 CHINO HYDRO SUBAREA						SANTA ANA RIVER HYDRO UNIT				Y0100										
						Y0181														
CA	08W-250015	36	5100	--	358	40	10	21	2	0	190	11	6	18.0	0.2	0.00	--	248	141	
	11/08/67	--	--	7.6		1.99	0.82	0.91	0.05	0.00	3.11	0.23	0.17	0.29				202	0	
						53	22	24	1	0	82	6	4	8						
	02/01/68	--	36	5100	--	350	43	8	22	2	0	193	9	9	19.0	0.2	0.02	--	171	140
				8.2		2.14	0.66	0.96	0.05	0.00	3.16	0.19	0.25	0.31				208	0	
						56	17	25	1	0	81	5	6	8						
	03/21/68	--	36	5100	--	362	43	8	22	2	0	188	8	10	19.0	0.2	0.00	--	213	140
				7.7		2.14	0.66	0.96	0.05	0.00	3.08	0.17	0.28	0.31				205	0	
						56	17	25	1	0	80	4	7	8						
	04/24/68	--	36	5100	--	366	46	7	22	2	0	188	9	9	19.0	0.3	0.00	--	210	144
				7.8		2.29	0.57	0.96	0.05	0.00	3.08	0.19	0.25	0.31				207	0	
						59	15	25	1	0	80	5	7	8						
	05/08W-268015	36	5100	--	504	75	11	2	2	0	183	28	15	69.0	0.3	0.03	--	387	233	
	10/11/67	--		7.8		3.74	0.90	0.09	0.05	0.00	3.00	0.58	0.42	1.11				293*	83	
						78	19	2	1	0	59	11	8	22						
	11/08/67	--	36	5100	--	502	73	11	11	1	0	183	32	13	69.0	0.3	0.19	--	334	227
				7.7		3.64	0.90	0.48	0.02	0.00	3.00	0.67	0.37	1.11				301	77	
						72	18	9	0	0	58	13	7	22						
	02/01/68	--	36	5100	--	504	74	13	11	2	0	188	30	14	75.0	0.3	0.03	--	302	238
				8.0		3.69	1.07	0.48	0.05	0.00	3.08	0.62	0.39	1.21				312	84	
						70	20	9	1	0	58	12	7	23						
	03/21/68	--	36	5100	--	509	74	13	11	2	0	183	28	15	73.0	0.3	0.00	--	314	238
				7.5		3.69	1.07	0.48	0.05	0.00	3.00	0.58	0.42	1.18				307	88	
						70	20	9	1	0	58	11	8	23						
	05/08W-26H015	70	5868	81	574	124	25	31	3	--	295	143	34	62.0	0.1	0.07	24	594	412	
	07/18/68	--		7.6		6.19	2.05	1.35	0.08		4.83	2.98	0.96	1				592	171	
						64	21	14	1		49	30	10	10						
	05/08W-28E015	70	5868	82	348	53	7	15	2	--	177	23	7	25.0	0.1	0.09	24	301	161	
	07/18/68	--		8.0		2.64	0.57	0.65	0.05		2.90	0.48	0.20	0.40				244	16	
						67	15	17	1		73	12	5	10						
	05/08W-28E025	70	1101	68	400	56	9	16	1	0	180	27	10	38.3	--	--	0	337	176	
	10/23/67	--		8.3		2.79	0.74	0.69	0.02	0.00	2.95	0.56	0.28	0.62				246	28	
						66	17	16	1	0	67	13	6	14						
	06/12/68	--	70	5050	68	567	72	13	12	2	--	171	45	13	70.0	0.4	0.00	--	343	233
				7.5		3.59	1.07	0.52	0.05		2.80	0.94	0.37	1.13				312	93	
						69	20	10	1		53	18	7	22						
	08/26/68	--	70	1101	72	376	50	9	14	1	0	168	26	7	22.5	0.3	--	0	297	161
				7.8		2.49	0.74	0.61	0.02	0.00	2.75	0.54	0.20	0.36				213	23	
						64	19	16	1	0	71	14	5	9						
	05/08W-28F015	70	5868	82	348	59	9	17	2	--	182	26	9	40.0	0.2	0.09	23	335	184	
	07/18/68	--		8.1		2.94	0.74	0.74	0.05		2.98	0.54	0.25	0.64				275	35	
						66	16	16	1		67	12	6	15						
	05/08W-28G025	36	5100	--	404	58	10	13	2	0	183	21	11	31.0	0.3	0.03	--	292	186	
	10/11/67	--		7.7		2.89	0.82	0.56	0.05	0.00	3.00	0.44	0.31	0.50				237	36	
						67	19	13	1	0	71	10	7	12						
	04/24/68	--	36	5100	--	442	62	10	14	2	0	176	27	11	44.0	0.4	0.00	--	283	196
				8.1		3.09	0.82	0.61	0.05	0.00	2.88	0.56	0.31	0.71				257	52	
						68	18	13	1	0	65	13	7	16						
	07/18/68	--	70	5868	82	417	64	10	13	2	--	185	26	10	45.0	0.0	0.04	24	345	201
				7.8		3.19	0.82	0.56	0.05		3.03	0.54	0.28	0.72				285	49	
						69	18	12	1		66	12	6	16						
	05/08W-28L015	70	5868	82	293	46	7	16	2	--	177	20	6	10.0	0.1	0.09	23	275	144	
	07/18/68	--		8.2		2.29	0.57	0.69	0.05		2.90	0.42	0.17	0.16				218	0	
						63	16	19	1		79	11	5	4						
	05/08W-28M03S	70	5868	82	293	60	9	13	2	4	180	23	10	33.0	0.1	0.04	24	268	187	
	07/18/68	--		8.2		2.99	0.74	0.56	0.05	0.13	2.95	0.48	0.28	0.53				267	33	
						69	17	13	1	3	67	11	6	12						
	05/08W-28N01S	70	5050	70	414	55	10	12	2	--	179	22	8	28.8	0.4	0.00	--	279	178	
	06/12/68	--		7.7		2.74	0.82	0.52	0.05		2.93	0.46	0.22	0.46				227	25	
						66	20	13	1		72	11	5	11						
	05/08W-28N02S	70	5868	81	286	53	6	14	2	8	174	20	6	8.0	0.0	0.04	23	227	157	
	07/18/68	--		8.3		2.64	0.49	0.61	0.05	0.27	2.85	0.42	0.17	0.13				226	1	
						70	13	16	1	7	74	11	4	3						
	05/08W-30J01S	70	5050	70	629	89	17	15	2	--	229	73	17	42.5	0.4	0.00	--	427	292	
	06/12/68	--		7.4		4.44	1.40	0.65	0.05		3.75	1.52	0.48	0.68				369	91	
						68	21	10	1		58	24	7	11						
	05/05E-30L01S	33	5050	100	1568	41	1	287	3	--	37	495	124	5.5	7.2	0.85	--	984	106	
	04/15/68	1235		7.8		2.04	0.08	12.48	0.08		0.61	10.30	3.50	0.09				983	63	
						14	1	85	0		4	71	24	1						

TABLE E-1

MINERAL ANALYSES OF GROUND WATER

SOUTHERN CALIFORNIA

STATE WELL NO. DATE	COUNTY	LAB SAMPLER	TEMP PH	EC	MINERAL CONSTITUENTS IN				MILLIGRAMS PER LITER MILLIEQUIVALENTS PER LITER PERCENT REACTANCE VALUES				MILLIGRAMS PER LITER				TDS 180C (*105C) SUM	N
					CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SI02		
MIDDLE SANTA ANA RIV HYDR SUBUNITY0180 CHINO HYDRO SUBAREA Y01B1																		
02S/05E-30L02S 04/15/68 1250	33	5050	78 7.9	1608	51 2.54 16	6 0.49 3	285 12.40 80	3 0.08 0	--	95 1.56 10	478 9.95 65	130 3.67 24	2.5 0.04 0	4.4	0.70	--	1030 1008	1
01S/08W-30K01S 07/18/68 --	70	5868	82 7.8	553	91 4.54 69	15 1.23 19	17 0.74 11	2 0.05 1	--	240 3.93 61	71 1.48 23	19 0.53 8	33.0 0.53 8	0.1	0.04	27	393 394	2
01S/08W-31J01S 07/18/68 --	70	5868	81 7.8	394	67 3.34 65	11 0.90 18	19 0.83 16	2 0.05 1	--	218 3.57 69	42 0.87 17	19 0.53 10	10.0 0.16 3	0.2	0.04	27	306 305	2
01S/08W-32G01S 07/18/68 --	70	5868	81 8.0	338	60 2.99 69	9 0.74 17	13 0.56 13	2 0.05 1	--	196 3.21 74	24 0.50 12	9 0.25 6	22.0 0.35 8	0.1	0.04	26	263 262	1
01S/08W-33D01S 07/18/68 --	70	5868	81 8.1	270	53 2.64 65	9 0.74 18	15 0.65 16	2 0.05 1	--	182 2.98 75	24 0.50 12	8 0.22 6	18.0 0.29 7	0.1	0.07	24	242 243	1
01S/08W-35C02S 11/20/67 --	36	5100	-- 8.0	393	56 2.79 67	11 0.90 22	9 0.39 9	2 0.05 1	0	190 3.11 74	19 0.39 9	10 0.28 7	26.0 0.42 10	0.4	0.00	--	252 227	1
01S/08W-35Q01S 11/20/67 --	36	5100	-- 7.9	336	46 2.29 61	11 0.90 24	11 0.48 13	2 0.05 1	0	188 3.08 85	16 0.33 9	4 0.11 3	4.8 0.08 2	0.2	0.02	--	127 188	1
02S/04W-33R02S 10/04/67 --	33	4103	72 7.6	790	50 2.49 32	25 2.05 26	72 3.13 40	5 0.13 2	0	181 2.97 39	46 0.96 12	89 2.51 33	75.0 1.21 16	0.7	0.19	--	522 452	2
02S/05W-07N01S 10/24/67 --	36	5100	-- 7.7	1748	156 7.78 41	57 4.69 25	141 6.13 33	5 0.13 1	0	408 6.69 36	226 4.70 25	188 5.30 28	128.0 2.06 11	0.5	0.11	--	1185 1103	6 2
05/23/68 --	36	5100	-- 8.7	1721	160 7.98 42	58 4.77 25	136 5.91 31	5 0.13 1	5	403 6.60 35	220 4.58 24	188 5.30 28	129.0 2.08 11	0.5	0.11	--	1231 1100	6 2
02S/05W-14D01S 10/04/67 --	33	4103	70 8.2	588	28 1.40 26	7 0.57 11	79 3.44 63	1 0.02 0	0	110 1.80 33	72 1.50 27	75 2.11 38	6.0 0.10 2	1.6	0.65	--	380 325	1
02S/06W-05A01S 10/24/67 --	36	5100	-- 7.2	305	43 2.14 63	4 0.33 10	20 0.87 26	2 0.05 1	0	166 2.72 84	12 0.25 8	7 0.20 6	4.6 0.07 2	0.1	0.03	--	151 175	1
05/23/68 --	36	5100	-- 9.2	315	43 2.14 63	5 0.41 12	18 0.78 23	2 0.05 1	7	149 2.44 75	10 0.21 6	10 0.28 9	6.5 0.10 3	0.2	0.00	--	192 175	1
02S/06W-12M01S 10/24/67 --	36	5100	-- 7.3	1042	89 4.44 38	44 3.62 31	79 3.44 30	2 0.05 0	0	388 6.36 56	92 1.91 17	95 2.68 24	21.0 0.34 3	0.4	0.13	--	601 614	4
05/23/68 --	36	5100	-- 8.1	1030	88 4.39 40	42 3.45 31	72 3.13 28	2 0.05 0	0	371 6.08 55	88 1.83 17	94 2.65 24	24.0 0.39 3	0.5	0.16	--	659 594	3
02S/06W-14K01S 10/24/67 --	36	5100	-- 7.2	1272	105 5.24 37	46 3.78 27	113 4.91 35	3 0.08 0	0	405 6.64 48	139 2.89 21	123 3.47 25	50.0 0.81 6	0.6	0.08	--	804 779	4 1
05/23/68 --	36	5100	-- 7.7	1251	104 5.19 38	48 3.95 29	100 4.35 32	3 0.08 1	0	403 6.60 50	129 2.68 20	115 3.24 24	42.0 0.68 5	0.6	0.07	--	807 740	4 1
02S/06W-21Q01S 10/24/67 --	36	5100	-- 7.4	1319	159 7.93 56	16 1.31 9	113 4.91 34	4 0.10 1	0	347 5.69 41	143 2.98 22	178 5.02 36	6.2 0.10 1	0.1	0.32	--	838 791	4 1
05/23/68 --	36	5100	-- 8.1	1273	152 7.58 57	16 1.31 10	98 4.26 32	4 0.10 1	0	356 5.83 43	129 2.68 20	178 5.02 37	1.0 0.02 0	0.2	0.40	--	811 754	4 1
02S/06W-30Q01S 10/24/67 --	36	5100	-- 7.3	1255	187 9.33 68	17 1.40 10	68 2.96 21	4 0.10 1	0	334 5.47 40	198 4.12 30	125 3.52 26	38.0 0.61 4	0.2	0.09	--	855 802	5 2
05/23/68 --	36	5100	-- 8.5	1140	166 8.28 66	18 1.48 12	60 2.61 21	4 0.10 1	0	295 4.83 38	175 3.64 28	129 3.64 28	43.0 0.69 5	0.2	0.07	--	790 741	4 2
02S/06W-31O02S 10/24/67 --	36	5100	-- 7.5	1202	134 6.69 55	20 1.64 14	85 3.70 30	3 0.08 1	0	251 4.11 35	175 3.64 31	110 3.10 26	60.0 0.97 8	0.2	0.05	--	743 711	4 2
05/23/68 --	36	5100	-- 7.9	1211	161 8.03 61	21 1.73 13	74 3.22 25	3 0.08 1	0	366 6.00 46	158 3.29 25	104 2.93 22	50.0 0.81 6	0.3	0.02	--	818 752	4 1

TABLE E-1
MINERAL ANALYSES OF GROUND WATER
SOUTHERN CALIFORNIA

DATE	WELL NO.	COUNTY	LAB SAMPLER	TEMP PH	EC	MINERAL CONSTITUENTS IN													TDS 180C (*105C) SUM	TH NCH
						MILLIGRAMS PER LITER				MILLIEQUIVALENTS PER LITER				PERCENT REACTANCE VALUES						
						CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SI02			
DDLE SANTA ANA RIV HYDR SUBUNITY0180						SANTA ANA RIVER HYDRO UNIT Y0100														
CHINO HYDRO SUBAREA Y0181																				
S/07W-03H01S	36		5100	--	917	40	15	98	12	0	373	38	80	6.2	0.5	1.50	--	492	162	
0/25/67	--		--	8.0		1.99	1.23	4.26	0.31	0.00	6.11	0.79	2.26	0.10				475#	0	
						26	16	55	4	0	66	8	24	1						
S/07W-04801S	36		5100	--	349	37	14	19	2	0	183	16	8	8.8	0.2	0.01	--	227	150	
0/25/67	--		--	8.0		1.85	1.15	0.83	0.05	0.00	3.00	0.33	0.22	0.14				195	0	
						48	30	21	1	0	81	9	6	4						
S/22/68	--		5100	--	365	44	10	17	2	0	181	12	11	9.7	0.3	0.00	--	237	151	
			--	7.7		2.19	0.82	0.74	0.05	0.00	2.97	0.25	0.31	0.16				195	3	
						58	22	19	1	0	80	7	8	4						
S/07W-04802S	36		5050	--	350	40	12	18	2	--	179	33	11	8.0	0.2	0.02	--	229	150	
0/18/67	900		--	7.9		1.99	0.99	0.78	0.05		2.93	0.69	0.31	0.13				213#	3	
						52	26	20	1		72	17	8	3						
S/05/68	1345		5050	--	359	40	12	18	1	--	183	15	15	10.0	0.3	0.00	--	232	149	
			--	7.5		1.99	0.99	0.78	0.02		3.00	0.31	0.42	0.16				202	0	
						53	26	21	1		77	8	11	4						
S/07W-06J01S	36		5100	--	572	62	23	20	2	0	212	38	20	67.0	0.3	0.01	--	357	249	
0/25/67	--		--	8.1		3.09	1.89	0.87	0.05	0.00	3.47	0.79	0.56	1.08				337	76	
						52	32	15	1	0	59	13	9	18						
S/22/68	--		5100	--	496	64	14	17	2	0	198	24	16	49.0	0.4	0.02	--	328	217	
			--	8.0		3.19	1.15	0.74	0.05	0.00	3.24	0.50	0.45	0.79				284	55	
						62	22	14	1	0	65	10	9	16						
S/07W-10C01S	36		5050	--	1017	107	34	60	2	--	321	73	95	82.0	0.2	0.85	--	682	407	
0/18/67	815		--	7.8		5.34	2.80	2.61	0.05		5.26	1.52	2.68	1.32				612	144	
						49	26	24	0		49	14	25	12						
S/21/68	845		5050	--	1028	115	33	56	2	--	313	81	96	69.0	0.2	0.88	--	660	423	
			--	7.7		5.74	2.71	2.43	0.05		5.13	1.69	2.71	1.11				607	166	
						52	25	22	0		48	16	25	10						
S/05/68	1400		5050	--	931	106	35	50	2	--	325	72	85	60.0	0.2	0.66	--	624	409	
			--	7.3		5.29	2.88	2.17	0.05		5.33	1.50	2.40	0.97				571	142	
						51	28	21	0		52	15	23	9						
S/07W-10M01S	36		5050	--	643	75	23	24	2	7	224	35	40	60.0	0.2	0.03	--	403	282	
0/18/67	830		--	8.2		3.74	1.89	1.04	0.05	0.23	3.67	0.73	1.13	0.97				377	87	
						56	28	15	1	3	55	11	17	14						
S/21/68	1000		5050	--	1027	129	36	31	2	--	304	76	81	126.0	0.2	0.02	--	685	470	
			--	7.6		6.44	2.96	1.35	0.05		4.98	1.58	2.28	2.03				631	209	
						60	27	12	0		46	14	21	19						
S/05/68	1405		5050	--	986	121	37	31	2	--	306	76	77	90.0	0.3	0.00	--	677	454	
			--	7.7		6.04	3.04	1.35	0.05		5.01	1.58	2.17	1.45				585	192	
						58	29	13	0		49	15	21	14						
S/07W-10L04S	36		5050	--	1073	124	26	41	2	--	351	73	93	102.0	0.2	0.33	--	726	466	
0/18/67	835		--	7.9		6.19	2.14	1.78	0.05		5.75	1.52	2.62	1.64				635#	166	
						61	21	17	0		50	13	23	14						
S/05/68	1410		5050	--	1075	117	42	41	2	--	350	68	95	89.0	0.3	0.27	--	692	465	
			--	7.6		5.84	3.45	1.78	0.05		5.74	1.41	2.68	1.43				627	166	
						52	31	16	0		51	13	24	13						
S/07W-10M01S	36		5100	--	1059	112	50	31	2	0	330	71	93	111.0	0.3	0.05	--	691	485	
0/25/67	--		--	7.9		5.59	4.11	1.35	0.05	0.00	5.41	1.48	2.62	1.79				633	215	
						50	37	12	0	0	48	13	23	16						
S/22/68	--		5100	--	951	119	35	26	2	0	293	53	85	87.0	0.4	0.01	--	620	441	
			--	7.8		5.94	2.88	1.13	0.05	0.00	4.80	1.10	2.40	1.40				552	201	
						59	29	11	0	0	49	11	25	14						
S/07W-11001S	36		5100	--	796	106	24	29	2	0	261	65	65	73.0	0.2	0.07	--	501	363	
0/25/67	--		--	7.6		5.29	1.97	1.26	0.05	0.00	4.28	1.35	1.83	1.18				493	149	
						62	23	15	1	0	49	16	21	14						
S/22/68	--		5100	--	861	110	26	31	2	0	273	60	66	70.0	0.3	0.18	--	557	382	
			--	7.6		5.49	2.14	1.35	0.05	0.00	4.47	1.25	1.86	1.13				500	158	
						61	24	15	1	0	51	14	21	13						
S/07W-15001S	36		5100	--	1151	137	41	49	3	0	471	41	97	64.0	0.2	0.00	--	697	511	
0/25/67	--		--	7.3		6.84	3.37	2.13	0.08	0.00	7.72	0.85	2.73	1.03				664	124	
						55	27	17	1	0	62	7	22	8						
S/22/68	--		5100	--	383	46	11	19	2	0	205	10	9	8.5	0.2	0.00	--	237	160	
			--	8.2		2.29	0.90	0.83	0.05	0.00	3.36	0.21	0.25	0.14				207	0	
						56	22	20	1	0	85	5	6	3						
S/07W-15003S	36		5050	--	742	91	26	32	2	--	353	30	54	24.0	0.2	0.00	--	465	334	
9/05/68	1430		--	7.2		4.54	2.14	1.39	0.05		5.78	0.62	1.52	0.39				433	45	
						56	26	17	1		69	7	18	5						
S/07W-17D01S	36		5100	--	772	85	34	27	2	0	290	61	31	98.0	0.3	0.02	--	508	352	
0/25/67	--		--	8.0		4.24	2.80	1.17	0.05	0.00	4.75	1.27	0.87	1.58				481	114	
						51	34	14	1	0	56	15	10	19						

TABLE E-1

MINERAL ANALYSES OF GROUND WATER

SOUTHERN CALIFORNIA

STATE WELL NO. DATE	COUNTY TIME	LAB SAMPLER	TEMP PH	EC	MINERAL CONSTITUENTS IN										MILLIGRAMS PER LITER			TDS 180C (*105C) SUM	N
					CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SI02	MILLIEQUIVALENTS PER LITER PERCENT REACTANCE VALUES		
MIDDLE SANTA ANA RIV HYDR SUBUNITY01B0 CHINO HYDRO SUBAREA					SANTA ANA RIVER HYDRO UNIT										Y0100				
Y01B1																			
02S/07W-17D01S 05/22/68	36	5100	-- 7.5	833	111 5.54 62	29 2.38 27	23 1 11	2 0.05 1	0 0.00 0	298 4.88 56	67 1.39 16	33 0.93 11	92.0 1.48 17	0.3	0.00	--	579 504	3 1	
02S/07W-17L01S 05/22/68	36	5100	-- 7.9	542	70 3.49 61	16 1.31 23	19 0.83 14	2 0.05 1	0 0.00 0	229 3.75 67	25 0.52 9	20 0.56 10	46.0 0.74 13	0.3	0.00	--	350 311	2	
02S/07W-21L01S 10/25/67	36	5100	-- 8.0	513	54 2.69 49	22 1.81 33	21 0.91 17	2 0.05 1	0 0.00 0	234 3.83 70	22 0.46 8	18 0.51 9	42.5 0.68 12	0.3	0.00	--	338 297	2	
10/25/67	36	5100	-- 7.9	563	71 3.54 59	15 1.23 20	28 1.22 20	2 0.05 1	0 0.00 0	254 4.16 69	32 0.67 11	22 0.62 10	36.0 0.58 10	0.2	0.00	--	349 332	2	
05/23/68	36	5100	-- 8.1	637	84 4.19 61	17 1.40 20	27 1.17 17	2 0.05 1	0 0.00 0	281 4.60 67	32 0.67 10	31 0.87 13	46.0 0.74 11	0.2	0.00	--	469 378	2	
02S/07W-22E01S 05/14/68	36	5050	73 8.2	960	115 5.74 56	35 2.88 28	34 1.48 15	2 0.05 0	0 0.00 0	429 7.03 71	29 0.60 6	63 1.78 18	29.0 0.47 5	0.2	0.00	--	593 519	4	
02S/07W-22K01S 10/25/67	36	5100	-- 7.7	359	45 2.24 57	10 0.82 21	18 0.78 20	2 0.05 1	0 0.00 0	200 3.28 83	11 0.23 6	12 0.34 9	5.3 0.08 2	0.0	0.00	--	223 202	1	
05/14/68	36	5050	-- 8.4	386	44 2.19 57	10 0.82 21	19 0.83 21	1 0.02 1	2 0.07 2	197 3.23 82	13 0.27 7	9 0.25 6	6.8 0.11 3	0.2	0.00	--	210 202	1	
05/22/68	36	5100	-- 8.2	362	47 2.34 59	10 0.82 20	18 0.78 20	2 0.05 1	0 0.00 0	200 3.28 83	11 0.23 6	11 0.31 8	8.0 0.13 3	0.3	0.00	--	235 206	1	
02S/07W-22P01S 05/14/68	36	5050	71 8.3	939	112 5.59 58	32 2.63 27	33 1.43 15	2 0.05 0	0 0.00 0	362 5.93 62	51 1.06 11	48 1.35 14	74.0 1.19 12	0.3	0.10	--	562 531	4	
02S/07W-23E01S 10/25/67	36	5100	-- 7.8	699	87 4.34 58	23 1.89 25	27 1.17 16	2 0.05 1	0 0.00 0	295 4.83 65	41 0.85 11	32 0.90 12	55.0 0.89 12	0.2	0.00	--	427 413	2	
05/22/68	36	5100	-- 8.0	709	91 4.54 60	22 1.81 24	26 1.13 15	2 0.05 1	0 0.00 0	293 4.80 64	40 0.83 11	32 0.90 12	57.0 0.92 12	0.3	0.00	--	459 415	2	
02S/07W-27A01S 10/25/67	36	5100	-- 7.6	1053	126 6.29 52	36 2.96 25	61 2.65 22	3 0.08 1	0 0.00 0	491 8.05 68	51 1.06 9	59 1.66 14	60.0 0.97 8	0.2	0.00	--	648 638	4	
05/22/68	36	5100	-- 8.1	1116	131 6.54 51	43 3.54 28	59 2.57 20	3 0.08 1	0 0.00 0	491 8.05 64	60 1.25 10	69 1.94 15	83.0 1.34 11	0.3	0.03	--	785 690	5	
02S/07W-27O01S 05/14/68	36	5050	73 8.2	994	116 5.79 57	34 2.80 27	36 1.56 15	2 0.05 0	0 0.00 0	362 5.93 59	48 1.00 10	47 1.32 13	113.0 1.82 18	0.2	0.00	--	611 575	4	
02S/07W-31B01S 10/24/67	36	5100	-- 7.9	1069	101 5.04 46	35 2.88 26	70 3.04 28	3 0.08 1	0 0.00 0	317 5.19 48	117 2.43 22	69 1.94 18	78.0 1.26 12	0.3	0.04	--	756 630	2	
05/23/68	36	5100	-- 7.7	668	67 3.34 48	15 1.23 18	52 2.26 33	2 0.05 1	0 0.00 0	232 3.80 55	73 1.52 22	35 0.99 14	38.0 0.61 9	0.3	0.07	--	440 397	7	
02S/07W-31E01S 10/25/67	36	5100	-- 7.7	1103	93 4.64 40	26 2.14 18	112 4.87 42	2 0.05 0	0 0.00 0	439 7.19 62	101 2.10 18	62 1.75 15	32.5 0.52 4	0.3	0.25	--	738 645	2	
05/22/68	36	5100	-- 7.5	1166	120 5.99 47	24 1.97 16	107 4.65 37	2 0.05 0	0 0.00 0	464 7.60 61	99 2.06 16	78 2.20 18	41.0 0.66 5	0.4	0.27	--	731 700	8	
02S/07W-32F01S 05/23/68	36	5100	-- 8.1	630	67 3.34 51	9 0.74 11	54 2.35 36	3 0.08 1	0 0.00 0	232 3.80 58	73 1.52 23	31 0.87 13	22.0 0.35 5	0.2	0.00	--	414 374	2	
02S/07W-32K03S 10/24/67	36	5100	-- 7.1	357	19 0.95 26	5 0.41 11	53 2.30 62	1 0.02 1	0 0.00 0	144 2.36 65	33 0.69 19	15 0.42 12	11.0 0.18 5	0.4	0.28	--	266 209	2	
02S/07W-34K02S 10/24/67	36	5100	-- 7.5	1888	226 11.28 53	67 5.51 26	105 4.57 21	3 0.08 0	0 0.00 0	332 5.44 26	555 11.55 55	135 3.81 18	5.5 0.09 0	0.4	0.05	--	1416 1261	2	
05/23/68	36	5100	-- 7.6	2032	249 12.42 53	79 6.50 28	98 4.26 18	3 0.08 0	0 0.00 0	305 5.00 22	612 12.74 56	158 4.45 19	38.0 0.61 3	0.5	0.00	--	1881 1388	2	

TABLE E-1
MINERAL ANALYSES OF GROUND WATER
SOUTHERN CALIFORNIA

WELL NO. DATE	COUNTY	LAB SAMPLER	TEMP PH	EC	MINERAL CONSTITUENTS IN				MILLIGRAMS PER LITER MILLIEQUIVALENTS PER LITER PERCENT REACTANCE VALUES				MILLIGRAMS PER LITER				TDS 180C (*105C) SUM	TH NCH
					CA	MG	NA	K	CO3	HC03	SO4	CL	NO3	F	B	SI02		
SANTA ANA RIVER HYDRO UNIT					Y0100													
SANTA ANA RIVER HYDRO UNIT					Y01B1													
07W-35J01S	36	5100	--	703	28	28	88	3	0	273	52	65	0.0	0.0	0.05	--	365	185
0/24/67	--	--	8.3		1.40	2.30	3.83	0.08	0.00	4.47	1.08	1.83	0.00				399	0
					18	30	50	1	0	60	15	25	0					
5/23/68	36	5100	--	1033	117	24	82	3	0	447	59	75	46.0	0.2	0.00	--	676	391
			8.1		5.84	1.97	3.57	0.08	0.00	7.33	1.23	2.11	0.74				626	24
					51	17	31	1	0	64	11	18	6					
5/08W-14B01S	36	5100	--	389	51	10	16	2	0	183	22	12	17.0	0.0	0.00	--	185	168
1/20/67	--	--	8.1		2.54	0.82	0.69	0.05	0.00	3.00	0.46	0.34	0.27				220	18
					62	20	17	1	0	74	11	8	7					
5/21/68	36	5100	--	391	51	10	15	2	0	186	18	11	13.0	0.3	0.00	--	238	168
			7.9		2.54	0.82	0.65	0.05	0.00	3.05	0.37	0.31	0.21				212	16
					62	20	16	1	0	77	9	8	5					
5/08W-14H01S	36	5100	--	389	50	11	16	2	0	173	30	10	18.0	0.2	0.00	--	252	170
1/20/67	--	--	7.9		2.49	0.90	0.69	0.05	0.00	2.83	0.62	0.28	0.29				223	28
					60	22	17	1	0	70	15	7	7					
5/21/68	36	5100	--	394	49	10	15	2	0	171	20	12	18.0	0.3	0.00	--	238	163
			7.4		2.44	0.82	0.65	0.05	0.00	2.80	0.42	0.34	0.29				211	23
					62	21	16	1	0	73	11	9	7					
5/08W-15L01S	36	5100	--	642	94	14	21	2	0	222	136	13	8.5	0.2	0.00	--	410	292
1/20/67	--	--	8.0		4.69	1.15	0.91	0.05	0.00	3.64	2.83	0.37	0.14				398	110
					69	17	13	1	0	52	41	5	2					
5/08W-22B01S	36	5100	--	428	56	10	20	2	0	186	41	13	13.0	0.2	0.00	--	231	181
1/20/67	--	--	8.1		2.79	0.82	0.87	0.05	0.00	3.05	0.85	0.37	0.21				247	28
					62	18	19	1	0	68	19	8	5					
5/08W-25L01S	36	5100	--	861	121	22	33	3	0	254	178	33	43.0	0.2	0.00	--	600	393
1/20/67	--	--	7.8		6.04	1.81	1.43	0.08	0.00	4.16	3.70	0.93	0.69				559	184
					64	19	15	1	0	44	39	10	7					
5/22/68	36	5100	--	839	117	22	34	3	0	247	145	36	61.0	0.4	0.05	--	602	383
			7.8		5.84	1.81	1.48	0.08	0.00	4.05	3.02	1.01	0.98				540	180
					63	20	16	1	0	45	33	11	11					
5/08W-25M01S	36	5100	--	560	75	13	25	2	0	229	47	35	12.0	0.2	0.00	--	309	241
1/20/67	--	--	8.0		3.74	1.07	1.09	0.05	0.00	3.75	0.98	0.99	0.19				322	53
					63	18	18	1	0	63	16	17	3					
5/22/68	36	5100	--	578	77	13	25	2	0	227	43	38	12.0	0.3	0.04	--	384	246
			7.7		3.84	1.07	1.09	0.05	0.00	3.72	0.89	1.07	0.19				322	60
					63	18	18	1	0	63	15	18	3					
5/08W-26K01S	36	5100	--	908	107	28	58	3	0	312	184	41	0.0	0.4	0.05	--	542	382
1/20/67	--	--	8.0		5.34	2.30	2.52	0.08	0.00	5.11	3.83	1.16	0.00				575	126
					52	22	25	1	0	51	38	11	0					
5/07W-03N01S	36	5100	--	764	99	16	39	2	0	312	64	48	23.0	0.1	0.00	--	552	313
0/24/67	--	--	7.7		4.94	1.31	1.70	0.05	0.00	5.11	1.33	1.35	0.37				445	57
					62	16	21	1	0	63	16	17	4					
5/23/68	36	5100	--	775	98	18	36	2	0	286	65	52	24.0	0.2	0.00	--	562	319
			7.8		4.89	1.48	1.56	0.05	0.00	4.69	1.35	1.47	0.39				436	84
					61	18	20	1	0	59	17	19	5					
5/07W-04A01S	36	5100	--	900	106	18	48	2	0	288	109	59	28.0	0.2	0.15	--	685	339
0/24/67	--	--	7.6		5.29	1.48	2.09	0.05	0.00	4.72	2.27	1.66	0.45				512	102
					59	17	23	1	0	52	25	18	5					
5/23/68	36	5100	--	885	94	29	37	2	0	278	107	57	28.0	0.3	0.01	--	667	354
			7.8		4.69	2.38	1.61	0.05	0.00	4.56	2.23	1.61	0.45				491	126
					54	27	18	1	0	51	25	18	5					
5/07W-04D01S	36	5100	--	494	38	13	52	2	0	205	40	23	20.0	0.3	0.12	--	311	148
0/24/67	--	--	8.0		1.90	1.07	2.26	0.05	0.00	3.36	0.83	0.65	0.32				290	0
					36	20	43	1	0	65	16	13	6					
5/23/68	36	5100	--	601	67	10	55	2	0	256	48	31	25.0	0.3	0.05	--	417	208
			7.9		3.34	0.82	2.39	0.05	0.00	4.19	1.00	0.87	0.40				365	0
					51	12	36	1	0	65	15	13	6					
5/07W-04H01S	36	5100	--	1134	95	53	70	3	0	405	100	103	46.5	0.3	0.06	--	803	455
0/24/67	--	--	8.1		4.74	4.36	3.04	0.08	0.00	6.64	2.08	2.90	0.75				670	123
					39	36	25	1	0	54	17	23	6					
5/23/68	36	5100	--	1332	135	35	76	3	0	344	116	137	74.0	0.3	0.03	--	1008	481
			7.7		6.74	2.88	3.30	0.08	0.00	5.64	2.41	3.86	1.19				746	199
					52	22	25	1	0	43	18	29	9					
5/07W-10C01S	36	5100	--	583	72	13	32	2	0	266	36	31	11.0	0.2	0.02	--	341	233
0/24/67	--	--	7.6		3.59	1.07	1.39	0.05	0.00	4.36	0.75	0.87	0.18				328	15
					59	17	23	1	0	71	12	14	3					
5/23/68	36	5100	--	573	72	15	31	2	0	261	35	37	1.5	0.2	0.01	--	372	241
			8.1		3.59	1.23	1.35	0.05	0.00	4.28	0.73	1.04	0.02				322	27
					58	20	22	1	0	70	12	17	0					

TABLE E-1
MINERAL ANALYSES OF GROUND WATER

SOUTHERN CALIFORNIA

STATE WELL NO. DATE	COUNTY	LAB TIME	TEMP SAMPLER PH	EC	MINERAL CONSTITUENTS IN				MILLIGRAMS PER LITER MILLIEQUIVALENTS PER LITER PERCENT REACTANCE VALUES				MILLIGRAMS PER LITER				TDS 180C (*105C) SUM	N	
					CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SI02			
MIDDLE SANTA ANA RIV HYDR SUBUNITY0180 CHINO HYDRO SUBAREA					SANTA ANA RIVER HYDRO UNIT				Y0100										
					Y01B1														
01N/06W-21P01S 10/18/67	36	5050	-- 7.8	1119	165 8.23 69	29 2.38 20	30 1.30 11	2 0.05 0	--	235 3.85 31	213 4.43 36	133 3.75 30	17.0 0.27 2	0.2	0.02	--	951 705	5 3	
01N/06W-25K01S 11/21/67	36	5100	-- 8.1	327	49 2.44 69	8 0.66 19	8 0.35 10	3 0.08 2	0	166 2.72 80	22 0.46 13	7 0.20 6	2.2 0.03 1	0.4	0.02	--	194 182	1	
05/23/68	33	5100	-- 7.9	325	48 2.39 66	9 0.74 20	9 0.39 11	3 0.08 2	0	166 2.72 77	26 0.54 15	7 0.20 6	3.1 0.05 1	0.5	0.03	--	196 188	1	
01N/07W-27Q01S 11/27/67	36	5100	-- 7.7	424	48 2.39 52	12 0.99 21	27 1.17 25	2 0.05 1	0	193 3.16 69	43 0.89 20	8 0.22 5	17.0 0.27 6	0.3	0.02	--	291 253	1	
05/24/68	33	5100	-- 8.3	332	32 1.60 46	9 0.74 21	25 1.09 31	2 0.05 1	0	178 2.92 83	15 0.31 9	7 0.20 6	5.5 0.09 2	0.2	0.00	--	225 184	1	
HARRISON HYDRO SUBAREA					Y01B2														
01S/08W-17P04S 07/18/68	70	5868	82 8.6	241	8 0.40 15	0 0.00 0	52 2.26 84	1 0.02 1	7	95 1.56 55	28 0.58 21	7 0.20 7	15.0 0.24 9	0.1	0.09	13	178 178		
CLAREMONT HEIGHT HYDRO SUBAREA					Y01B3														
01S/08W-03A01S 10/23/67	70	1101	62 8.3	362	51 2.54 62	15 1.23 30	7 0.30 7	2 0.05 1	0	193 3.16 77	29 0.60 15	4 0.11 3	12.8 0.21 5	--	--	0	313 216	1	
08/26/68	70	1101	75 8.1	394	56 2.79 69	12 0.99 24	5 0.22 5	1 0.02 1	0	192 3.15 77	32 0.67 16	3 0.08 2	10.2 0.16 4	0.4	--	0	311 214	1	
01N/08W-24L01S 11/22/67	36	5100	-- 7.8	350	51 2.54 66	11 0.90 23	8 0.35 9	2 0.05 1	0	190 3.11 80	29 0.60 15	5 0.14 4	3.1 0.05 1	0.4	0.05	--	220 203	1	
01N/08W-34N01S 06/12/68	70	5050	65 8.0	470	63 3.14 67	11 0.90 19	13 0.56 12	2 0.05 1	--	157 2.57 56	37 0.77 17	10 0.28 6	60.0 0.97 21	0.5	0.18	--	285 274	2	
01N/08W-35J01S 05/23/68	33	5100	-- 8.2	390	72 3.59 84	4 0.33 8	7 0.30 7	2 0.05 1	0	198 3.24 77	30 0.62 15	4 0.11 3	13.0 0.21 5	0.4	0.00	--	256 230	1	
CUCAMONGA HYDRO SUBAREA					Y01B4														
01S/07W-04B02S 11/22/67	36	5100	-- 7.5	286	34 1.70 55	9 0.74 24	14 0.61 20	2 0.05 2	0	159 2.61 83	15 0.31 10	4 0.11 4	6.8 0.11 3	0.4	0.02	--	199 164	1	
01N/07W-29E01S 11/22/67	36	5100	-- 8.0	311	46 2.29 67	10 0.82 24	6 0.26 8	2 0.05 1	0	183 3.00 86	18 0.37 11	3 0.08 2	2.2 0.03 1	0.4	0.03	--	207 178	1	
01N/07W-33A01S 11/22/67	36	5100	-- 7.7	404	44 2.19 53	12 0.99 24	21 0.91 22	2 0.05 1	0	120 1.97 49	35 0.73 18	10 0.28 7	63.0 1.02 25	0.4	0.00	--	288 247	1	
01N/07W-34H01S 11/22/67	36	5100	-- 7.9	330	40 1.99 56	10 0.82 23	16 0.69 19	2 0.05 1	0	149 2.44 71	22 0.46 13	11 0.31 9	15.0 0.24 7	0.4	0.04	--	218 190	1	
TEMESCAL HYDRO SUBAREA					Y01B5														
03S/06W-28H02S 04/19/68	33	5050	68 8.1	1131	91 4.54 37	35 2.88 24	106 4.61 38	4 0.10 1	--	339 5.56 48	128 2.66 23	106 2.99 26	25.0 0.40 3	0.5	0.16	--	768 663	3	
03S/07W-15Q03S 03/20/68	33	5050	-- 6.9	2339	104 5.19 20	127 10.44 41	225 9.79 38	6 0.15 1	--	583 9.55 38	228 4.75 19	373 10.52 41	32.0 0.52 2	0.4	0.88	--	1534 1383	78	
09/11/68	33	5050	-- 7.3	2469	179 8.93 33	89 7.32 27	248 10.79 40	9 0.23 1	0	621 10.18 37	250 5.20 19	396 11.17 41	40.0 0.64 2	0.5	0.94	--	1647 1518	81	
03S/07W-21N01S 04/09/68	33	5050	-- 7.5	1018	108 5.39 45	52 4.28 36	51 2.22 19	1 0.02 0	--	315 5.16 45	222 4.62 40	50 1.41 12	23.0 0.37 3	0.5	0.08	--	686 663	48	
09/11/68	33	5050	-- 7.5	1063	107 5.34 44	56 4.60 38	47 2.04 17	2 0.05 0	0	304 4.98 41	246 5.12 42	60 1.69 14	29.0 0.47 4	0.5	0.05	--	727 697	49	
03S/07W-22A04S 09/11/68	33	5050	-- 7.1	2314	158 7.88 31	87 7.15 28	225 9.79 38	28 0.72 3	0	631 10.34 40	267 5.56 22	334 9.42 37	18.0 0.29 1	0.4	0.89	--	1520 1429	75	

TABLE E-1
MINERAL ANALYSES OF GROUND WATER
SOUTHERN CALIFORNIA

WELL NO. DATE	COUNTY	LAB SAMPLER	TEMP PH	EC	MINERAL CONSTITUENTS IN				MILLIGRAMS PER LITER MILLIEQUIVALENTS PER LITER PERCENT REACTANCE VALUES					MILLIGRAMS PER LITER				TDS 180C (*105C) SUM	TH NCH
					CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SI02			
MIDDLE SANTA ANA RIV HYDR SUBUNITY0180 TEMESCAL HYDRO SUBAREA					SANTA ANA RIVER HYDRO UNIT					Y0100									
Y0185																			
35/07W-22H015 04/19/68 1445	33	5050	68 7.7	2070	154 7.68 35	58 4.77 22	208 9.05 42	8 0.20 1	--	358 5.87 27	270 5.62 26	329 9.28 43	39.0 0.63 3	0.5	0.86	--	1376 1244	623 330	
35/07W-22J045 03/20/68 1230	33	5050	-- 7.9	1536	148 7.38 45	43 3.54 21	126 5.48 33	4 0.10 1	--	416 6.82 41	156 3.25 20	195 5.50 33	60.0 0.97 6	0.4	0.31	--	991 938	546 205	
09/11/68 1133	33	5050	-- 7.5	1577	149 7.43 46	39 3.21 20	126 5.48 34	6 0.15 1	0	436 7.15 43	162 3.37 20	192 5.41 32	51.0 0.82 5	0.6	0.30	--	1005 941	532 175	
35/07W-22L015 09/11/68 1115	33	5050	-- 7.7	1083	110 5.49 50	28 2.30 21	70 3.04 28	5 0.13 1	0	269 4.41 41	125 2.60 24	102 2.88 27	55.0 0.89 8	0.7	0.03	--	680 628	390 169	
35/07W-24F015 04/19/68 1425	33	5050	66 8.2	1326	115 5.74 44	29 2.38 18	107 4.65 36	4 0.10 1	11 0.37 3	175 2.87 23	61 1.27 10	280 7.90 62	19.5 0.31 2	0.6	0.50	--	985 714	406 245	
35/07W-25A025 11/01/67 --	33	5050	-- 7.2	1880	--	--	--	--	--	445 7.29	--	269 7.58	--	--	2.05	--	-- --	616 233	
35/07W-25A035 10/04/67 1200	33	5050	-- 7.0	1954	165 8.23 38	59 4.85 22	193 8.39 39	2 0.05 0	--	446 7.31 35	213 4.43 21	278 7.84 38	79.0 1.27 6	0.4	2.50	--	1241 1212	654 270	
03/12/68 1820	33	5050	-- 7.5	1766	154 7.68 42	37 3.04 16	175 7.61 41	5 0.13 1	--	373 6.11 33	199 4.14 22	252 7.11 39	64.0 1.03 6	0.5	2.20	--	1130 1073	537 212	
35/07W-25M015 04/19/68 1400	33	5050	-- 8.2	1132	118 5.89 49	31 2.55 21	80 3.48 29	3 0.08 1	11 0.37 3	229 3.75 32	151 3.14 27	123 3.47 30	59.0 0.95 8	0.6	0.06	--	799 690	422 216	
35/07W-27H025 04/22/68 910	33	5050	66 8.2	1114	136 6.79 56	36 2.96 24	52 2.26 19	3 0.08 1	18 0.60 5	239 3.92 33	163 3.39 28	95 2.68 22	83.0 1.34 11	0.4	0.04	--	793 704	488 262	
35/07W-35L015 04/22/68 930	33	5050	72 8.0	860	78 3.89 45	29 2.38 28	52 2.26 26	2 0.05 1	--	142 2.33 28	139 2.89 35	81 2.28 27	49.0 0.79 9	0.4	0.00	--	599 501	314 168	
35/06W-04P015 09/11/68 1045	33	5050	-- 7.5	1227	137 6.84 50	41 3.37 25	74 3.22 24	4 0.10 1	0	296 4.85 35	264 5.50 40	94 2.65 19	45.0 0.72 5	0.8	0.09	--	852 806	511 268	
35/06W-08H015 04/22/68 1035	33	5050	64 8.1	1213	143 7.13 55	25 2.05 16	86 3.74 29	2 0.05 0	--	292 4.78 37	200 4.16 32	107 3.02 23	60.0 0.97 7	0.5	0.05	--	856 768	460 220	
35/07W-03F015 04/22/68 955	33	5050	66 8.0	1265	132 6.59 45	68 5.59 38	55 2.39 16	1 0.02 0	--	263 4.31 30	352 7.33 51	69 1.94 14	46.0 0.74 5	0.5	0.09	--	955 853	609 394	
ARLINGTON HYDRO SUBAREA					Y0186														
35/05E-10J015 04/15/68 --	33	5050	-- 7.9	1705	46 2.29 14	5 0.41 2	310 13.48 83	4 0.10 1	--	45 0.74 5	526 10.95 69	147 4.14 26	0.0 0.00 0	8.1	1.47	--	1090 1070	135 98	
35/05E-18M015 04/15/68 1420	33	5050	76 7.6	647	43 2.14 32	14 1.15 17	74 3.22 48	6 0.15 2	--	137 2.24 34	177 3.68 56	20 0.56 9	1.5 0.02 0	1.2	0.06	--	366 405	165 53	
35/05E-18R015 04/15/68 1400	33	5050	76 7.6	1147	76 3.79 31	18 1.48 12	157 6.83 55	9 0.23 2	--	93 1.52 13	420 8.74 74	55 1.55 13	1.0 0.02 0	0.9	0.10	--	710 783	264 188	
35/05E-20D015 04/15/68 1345	33	5050	80 7.5	1026	71 3.54 33	18 1.48 14	127 5.52 51	8 0.20 2	--	90 1.47 14	366 7.62 73	48 1.35 13	2.0 0.03 0	1.1	0.07	--	660 686	251 177	
35/05W-170015 05/17/68 --	33	5050	73 8.3	1270	99 4.94 38	33 2.71 21	121 5.26 40	3 0.08 1	0	352 5.77 45	137 2.85 22	96 2.71 21	84.0 1.35 11	0.3	0.30	--	778 747	383 94	
RIVERSIDE HYDRO SUBAREA					Y0187														
35/05E-16A035 04/16/68 1210	33	5050	68 7.9	862	87 4.34 46	24 1.97 21	69 3.00 32	4 0.10 1	--	320 5.24 57	82 1.71 18	68 1.92 21	21.5 0.35 4	0.5	0.17	--	490 514	316 53	
35/04E-10J015 04/15/68 1200	33	5050	80 8.1	350	19 0.95 27	4 0.33 9	49 2.13 60	5 0.13 4	--	152 2.49 73	12 0.25 7	23 0.65 19	2.0 0.03 1	0.6	0.02	--	182 190	64 0	
35/04W-28L025 06/24/68 --	36	5100	-- 7.9	955	95 4.74 46	17 1.40 13	95 4.13 40	4 0.10 1	0	366 6.00 57	99 2.06 20	68 1.92 18	33.0 0.53 5	0.9	0.21	--	599 593	307 7	

TABLE E-1

MINERAL ANALYSES OF GROUND WATER

SOUTHERN CALIFORNIA

STATE WELL NO. DATE	COUNTY TIME	LAB SAMPLER	TEMP PH	EC	MILLIGRAMS PER LITER										MILLIGRAMS PER LITER			TDS 180C (*105C) SUM
					MINERAL CONSTITUENTS IN										MILLIEQUIVALENTS PER LITER			
					CA	MG	NA	K	CO3	HCO3	504	CL	NO3	F	B	SI02		
MIDDLE SANTA ANA RIV HYDR SUBUNITY0180 RIVERSIDE HYDRO SUBAREA					SANTA ANA RIVER HYDRO UNIT										Y0100			
					Y0187													
01S/05W-33A025 06/24/68	36	5100	-- 7.6	839	111 5.54 62	18 1.48 16	43 1.87 21	4 0.10 1	0 0.00 0	435 7.13 77	17 0.35 4	56 1.58 17	8.5 0.14 1	0.3	0.08	--	497 472	
02S/04W-06A01S 11/30/67	36	5100	-- 8.0	805	93 4.64 56	19 1.56 19	45 1.96 24	5 0.13 1	0 0.00 0	293 4.80 58	77 1.60 19	67 1.89 23	1.1 0.02 0	0.0	500.01	500	49 1452	
02S/04W-06R01S 03/18/68	36	5050	-- 8.0	691	77 3.84 56	18 1.48 21	34 1.48 21	4 0.10 1	-- 3.65 53	49 1.02 15	62 1.75 25	30.0 0.48 7	0.6	0.04	--	408 385		
02S/04W-33R02S 04/25/68	33	5050	-- 7.5	791	49 2.44 31	28 2.30 29	70 3.04 39	4 0.10 1	-- 3.15 41	50 1.04 13	88 2.48 32	63.0 1.02 13	0.6	0.17	--	483 448		
02S/05W-02P01S 04/16/68	33	5050	66 7.8	812	105 5.24 56	17 1.40 15	60 2.61 28	3 0.08 1	-- 5.80 64	70 1.46 16	27 0.76 8	65.0 1.05 12	0.3	0.05	--	471 522		
02S/05W-10C03S 03/01/68	33	5050	-- 7.7	868	85 4.24 44	21 1.73 18	83 3.61 37	4 0.10 1	-- 6.39 69	70 1.46 16	38 1.07 12	18.0 0.29 3	0.5	0.09	--	573 512		
02S/05W-10F01S 04/16/68	33	5050	66 7.8	968	94 4.69 46	12 0.99 10	101 4.39 43	3 0.08 1	-- 5.51 54	102 2.12 21	79 2.23 22	24.0 0.39 4	0.2	0.11	--	557 581		
02S/05W-10G03S 03/01/68	33	5050	-- 7.7	730	84 4.19 57	22 1.81 25	29 1.26 17	4 0.10 1	-- 2.85 39	74 1.54 21	83 2.34 32	30.0 0.48 7	0.2	0.02	--	529 412		
02S/05W-12C01S 04/16/68	33	5050	66 7.9	780	74 3.69 45	12 0.99 12	80 3.48 42	4 0.10 1	-- 4.21 52	91 1.89 23	57 1.61 20	22.0 0.35 4	0.6	0.41	--	435 468		
02S/05W-14D01S 10/04/67	33	4103	70 8.2	588	28 1.40 26	7 0.57 11	79 3.44 63	1 0.02 0	0 0.00 0	110 1.80 33	72 1.50 27	75 2.11 38	6.0 0.10 2	1.6	0.65	--	380 325	
11/08/67	33	4103	70 9.3	459	0 0.00 0	15 1.23 24	92 4.00 76	0 0.00 0	19 0.63 16	31 0.51 13	30 0.62 15	80 2.26 56	1.1 0.02 0	1.9	0.74	--	262 255#	
04/19/68	33	5050	70 8.6	489	7 0.35 8	2 0.16 4	90 3.91 88	1 0.02 1	7 0.23 5	62 1.02 23	41 0.85 20	78 2.20 51	1.8 0.03 1	2.5	0.72	--	296 262	
02S/05W-17R01S 04/16/68	33	5050	70 7.9	1285	150 7.48 48	53 4.36 28	80 3.48 23	4 0.10 1	-- 8.39 55	170 3.54 23	97 2.73 18	28.0 0.45 3	0.4	0.15	--	892 835		
02S/05W-20R01S 04/16/68	33	5050	64 7.4	1000	150 7.48 67	21 1.73 15	44 1.91 17	4 0.10 1	-- 4.83 44	216 4.50 41	54 1.52 14	13.0 0.21 2	0.4	0.08	--	646 648		
02S/05W-22R01S 04/16/68	33	5050	68 7.9	468	66 3.29 64	10 0.82 16	22 0.96 19	2 0.05 1	-- 3.26 67	31 0.64 13	29 0.82 17	8.5 0.14 3	0.3	0.05	--	253 267#		
LAKE MATHEWS HYDRO SUBUNIT BEDFORD HYDRO SUBAREA					Y01C0										Y01C2			
04S/06W-16R02S 03/12/68	33	5050	-- 7.4	1309	108 5.39 40	29 2.38 17	134 5.83 43	0 0.00 0	-- 4.26 32	200 4.16 31	168 4.74 35	15.0 0.24 2	0.6	0.21	--	835 783		
04S/06W-21J01S 03/12/68	33	5050	-- 8.0	1477	198 9.88 56	45 3.70 21	90 3.91 22	2 0.05 0	-- 5.44 32	362 7.54 44	96 2.71 16	96.0 1.55 9	0.8	0.19	--	1129 1054		
09/11/68	33	5050	-- 7.4	1488	186 9.28 51	48 3.95 22	90 3.91 22	35 0.89 5	0 0.00 0	350 5.74 35	348 7.24 44	95 2.68 16	44.0 0.71 4	0.8	0.05	--	1113 1019#	
04S/06W-22D01S 03/12/68	33	5050	-- 7.4	1199	146 7.28 55	32 2.63 20	76 3.30 25	2 0.05 0	-- 4.00 31	285 5.93 45	76 2.14 16	61.0 0.98 7	0.8	0.13	--	836 799		
09/11/68	33	5050	-- 7.6	1266	154 7.68 56	34 2.80 20	75 3.26 24	3 0.08 0	0 0.00 0	269 4.41 31	306 6.37 45	82 2.31 16	58.0 0.93 7	0.9	0.05	--	943 846	
COLTON-RIALTO HYDRO SUBUNIT COLTON-RIALTO HYDRO SUBAREA					Y01D0										Y01D4			
01S/04W-15N10S 11/03/67	36	5050	90 --	--	--	--	--	--	--	--	--	--	--	--	1.00	--	--	
01S/04W-18E01S 12/01/67	36	5100	-- 8.3	286	40 1.99 65	6 0.49 16	13 0.56 18	1 0.02 1	0 0.00 0	159 2.61 81	18 0.37 12	4 0.11 3	8.1 0.13 4	0.4	0.00	--	161 169	

TABLE E-1

MINERAL ANALYSES OF GROUND WATER

SOUTHERN CALIFORNIA

DATE	WELL NO.	COUNTY	LAB TIME	TEMP SAMPLER PH	EC	MINERAL CONSTITUENTS IN				MILLIGRAMS PER LITER				MILLIGRAMS PER LITER				TDS 180C (*105C) SUM	TH NCM
						CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SI02		
SANTA ANA RIVER HYDRO UNIT						Y0100													
COLTON-RIALTO HYDRO SUBAREA						Y0104													
5/24/68	04W-18E01S	36	5100	--	354	52	5	14	2	0	170	16	7	14.0	0.4	0.00	--	181	150
				7.9		2.59	0.41	0.61	0.05	0.00	2.79	0.33	0.20	0.22				194	11
						71	11	17	1	0	79	9	6	6					
5/24/68	04W-21R01S	36	5100	--	915	80	17	90	6	0	327	84	84	0.8	1.0	0.45	--	541	270
				7.3		3.99	1.40	3.91	0.15	0.00	5.36	1.75	2.37	0.01				524	1
						42	15	41	2	0	56	18	25	0					
1/30/67	04W-28L02S	36	5100	--	967	71	21	100	3	0	312	114	67	29.0	0.8	0.24	--	604	264
				7.9		3.54	1.73	4.35	0.08	0.00	5.11	2.37	1.89	0.47				560	8
						36	18	45	1	0	52	24	19	5					
5/24/68	05W-12N01S	36	5100	--	351	59	5	12	2	0	182	14	6	18.0	0.3	0.00	--	197	168
				7.8		2.94	0.41	0.52	0.05	0.00	2.98	0.29	0.17	0.29				206	19
						75	10	13	1	0	80	8	4	8					
RECHE HYDRO SUBAREA						Y0105													
1/09/67	03W-18D02S	33	4103	70	400	26	10	40	2	0	133	15	39	20.0	0.7	0.03	--	245	106
				8.0		1.30	0.82	1.74	0.05	0.00	2.18	0.31	1.10	0.32				219	0
						33	21	44	1	0	56	8	28	8					
1/30/68	03W-1230	33	5050	72	409	26	10	40	2	--	132	14	36	21.0	0.8	0.08	--	238	106
				7.6		1.30	0.82	1.74	0.05		2.16	0.29	1.01	0.34				215	0
						33	21	44	1		57	8	27	9					
1/09/67	03W-20D04S	33	4103	74	312	15	5	38	3	0	121	8	28	4.0	1.1	0.02	--	198	58
				7.6		0.75	0.41	1.65	0.08	0.00	1.98	0.17	0.79	0.06				162	0
						26	14	57	3	0	66	5	26	2					
1/30/68	03W-1205	33	5050	74	307	14	6	37	3	--	112	10	27	6.0	1.3	0.05	--	206	60
				7.5		0.70	0.49	1.61	0.08		1.83	0.21	0.76	0.10				160	0
						24	17	56	3		63	7	26	3					
1/09/67	04W-12P02S	33	4103	74	481	35	9	46	2	0	164	15	50	15.0	0.8	0.04	--	285	124
				7.9		1.75	0.74	2	0.05	0.00	2.69	0.31	1.41	0.24				254	0
						38	16	44	1	0	58	7	30	5					
1/30/68	03W-1245	33	5050	68	491	35	11	47	2	--	167	13	52	16.0	0.8	0.02	--	311	133
				8.0		1.75	0.90	2.04	0.05		2.74	0.27	1.47	0.26				259	0
						37	19	43	1		58	6	31	5					
SANTA ANA R HYDRO SUBAREA						Y01E0													
BUNKER HILL HYDRO SUBAREA						Y01E2													
1/28/68	03E-17L01S	36	5050	68	626	86	11	20	2	0	193	67	11	67.0	0.6	0.00	--	378	260
				8.3		4.29	0.90	0.87	0.05	0.00	3.16	1.39	0.31	1.08				360	102
						70	15	14	1	0	53	23	5	18					
1/27/68	03W-01M01S	36	5050	--	314	32	8	18	2	0	119	24	10	11.0	0.5	0.00	--	195	113
				7.9		1.60	0.66	0.78	0.05	0.00	1.95	0.50	0.28	0.18				164	15
						52	21	25	2	0	67	17	10	6					
1/27/68	03W-03Q01S	36	5050	--	534	63	9	27	2	0	162	36	16	68.0	0.3	0.00	--	320	194
				8.0		3.14	0.74	1.17	0.05	0.00	2.65	0.75	0.45	1.10				301	61
						61	14	23	1	0	54	15	9	22					
1/18/68	03W-09E02S	36	5050	--	344	41	8	17	3	--	156	16	13	10.0	0.4	0.18	--	216	135
				8.0		2.04	0.66	0.74	0.08		2.56	0.33	0.37	0.16				186	7
						58	19	21	2		75	10	11	5					
1/28/68	03W-14P02S	36	5050	--	364	41	8	18	3	0	159	19	10	12.0	0.3	0.10	--	206	135
				8.3		2.04	0.66	0.78	0.08	0.00	2.61	0.39	0.28	0.19				190	5
						57	18	22	2	0	75	11	8	6					
1/27/68	03W-14P02S	36	5050	--	696	102	11	17	3	0	190	69	13	108.0	0.7	0.00	--	445	300
				8.2		5.09	0.90	0.74	0.08	0.00	3.11	1.44	0.37	1.74				418	144
						75	13	11	1	0	47	22	5	26					
1/27/68	03W-15A01S	36	5050	--	408	59	7	14	3	0	224	9	7	2.8	0.3	0.00	--	235	176
				7.8		2.94	0.57	0.61	0.08	0.00	3.67	0.19	0.20	0.04				213	0
						70	14	14	2	0	89	5	5	1					
1/27/68	03W-15M03S	36	5050	--	465	61	9	16	3	0	164	37	9	43.0	0.4	0.00	--	263	189
				8.2		3.04	0.74	0.69	0.08	0.00	2.69	0.77	0.25	0.69				259	55
						67	16	15	2	0	61	17	6	16					
1/18/68	03W-17C03S	36	5050	--	513	65	12	21	2	--	213	32	27	25.0	0.4	0.09	--	314	212
				7.6		3.24	0.99	0.91	0.05		3.49	0.67	0.76	0.40				290	37
						62	19	18	1		66	12	14	8					
1/28/68	03W-17C03S	36	5050	--	549	69	9	28	3	0	217	36	24	21.0	0.4	0.10	--	305	209
				8.3		3.44	0.74	1.22	0.08	0.00	3.56	0.75	0.68	0.34				298	31
						63	13	22	1	0	67	14	13	6					
1/29/68	03W-1400	36	5050	--	619	79	17	28	2	--	260	40	41	28.0	0.4	0.13	--	394	267
				7.5		3.94	1.40	1.22	0.05		4.26	0.83	1.16	0.45				364	54
						60	21	18	1		64	12	17	7					
1/28/68	03W-18L01S	36	5050	68	911	126	16	28	3	0	232	134	23	100.0	0.5	0.10	--	625	380
				8.3		6.29	1.31	1.22	0.08	0.00	3.80	2.79	0.65	1.61				545	190
						71	15	14	1	0	43	31	7	18					

TABLE E-1

MINERAL ANALYSES OF GROUND WATER

SOUTHERN CALIFORNIA

STATE WELL NO. DATE	COUNTY TIME	LAB SAMPLER	TEMP PH	EC	MINERAL CONSTITUENTS IN				MILLIGRAMS PER LITER MILLIEQUIVALENTS PER LITER PERCENT REACTANCE VALUES				MILLIGRAMS PER LITER				TDS 180C (*105C) SUM	
					CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SI02		
UPPER SANTA ANA R HYDRO SUBAREA Y01E0					SANTA ANA RIVER HYDRO UNIT					Y0100								
BUNKER HILL HYDRO SUBAREA Y01E2																		
01S/03W-19G02S 03/18/68 --	36	5050	-- 8.1	446	53 2.64 57	7 0.57 12	30 1.30 28	3 0.08 2	-- 2.74 62	167 0.77 17	37 0.56 13	20 0.34 8	21.0 1.1 0.04	--	--	--	281 255	
08/29/68 1330	36	5050	-- 7.8	411	42 2.09 48	9 0.74 17	33 1.43 33	2 0.05 1	-- 2.79 65	170 0.75 17	36 0.48 11	17 0.29 7	18.0 1.2 0.02	--	--	--	252 242	
01S/03W-20R02S 05/28/68 --	36	5050	72 8.4	545	64 3.19 60	10 0.82 16	28 1.22 23	2 0.05 1	2 0.07 1	183 3.00 59	35 0.73 14	27 0.76 15	35.0 1.1 0.00	--	--	--	316 295	
01S/03W-28E02S 05/28/68 --	36	5050	77 8.5	707	74 3.69 55	10 0.82 12	48 2.09 31	3 0.08 1	8 0.27 4	193 3.16 48	45 0.94 14	52 1.47 22	46.0 1.1 0.00	--	--	--	439 382	
01S/03W-28M01S 05/28/68 --	36	5050	-- 8.5	576	50 2.49 45	6 0.49 9	58 2.52 45	2 0.05 1	3 0.10 2	182 2.98 55	42 0.87 16	31 0.87 16	38.0 -- 0.10	--	--	--	339 320	
01S/03W-28M03S 05/28/68 --	36	5050	78 8.5	513	36 1.80 36	6 0.49 10	59 2.57 52	3 0.08 1	3 0.10 2	176 2.88 60	34 0.71 15	34 0.96 20	11.0 1.4 0.00	--	--	--	293 274	
01S/03W-31H01S 05/28/68 --	36	5050	71 8.5	1030	85 4.24 41	22 1.81 17	97 4.22 41	3 0.08 1	9 0.30 3	316 5.18 50	101 2.10 20	49 1.38 13	81.0 0.8 0.00	--	--	--	636 604	
01S/03W-35G08S 06/25/68 --	36	5100	-- 7.5	538	55 2.74 47	16 1.31 23	39 1.70 29	2 0.05 1	0 0.00 0	200 3.28 57	53 1.10 19	18 0.51 9	53.0 0.5 0.00	--	--	--	321 335	
01S/04W-03M02S 05/29/68 --	36	5050	67 8.2	396	52 2.59 64	11 0.90 22	11 0.48 12	3 0.08 2	0 0.00 0	205 3.36 87	14 0.29 7	5 0.14 4	5.5 0.4 0.00	--	--	--	203 203	
01S/04W-05E05S 05/30/68 --	36	5050	-- 8.3	513	74 3.69 70	10 0.82 16	15 0.65 12	4 0.10 2	0 0.00 0	239 3.92 77	44 0.92 18	6 0.17 3	5.9 0.3 0.00	--	--	--	285 277	
01S/04W-13G01S 08/29/68 1315	36	5050	-- 7.6	500	64 3.19 55	14 1.15 20	20 0.87 15	21 0.54 9	-- 3.52 69	215 0.83 16	40 0.56 11	20 0.21 4	13.0 0.4 0.42	--	--	--	326 299#	
01S/04W-13L01S 03/18/68 1345	36	5050	-- 7.8	737	105 5.24 69	17 1.40 18	20 0.87 11	4 0.10 1	-- 3.24 42	198 2.77 36	133 0.68 9	24 0.93 12	58.0 0.5 0.06	--	--	--	480 459	
05/28/68 --	36	5050	64 8.2	880	116 5.79 63	23 1.89 21	31 1.35 15	4 0.10 1	0 0.00 0	222 3.64 38	200 4.16 44	26 0.73 8	56.0 0.4 0.00	--	--	--	590 566	
01S/04W-13R01S 05/28/68 --	36	5050	-- 8.3	359	47 2.34 66	6 0.49 14	15 0.65 18	2 0.05 1	0 0.00 0	144 2.36 70	24 0.50 15	6 0.17 5	22.0 0.4 0.00	--	--	--	204 194	
01S/04W-15L03S 11/03/67 --	36	5050	106 8.6	428	11 0.55 13	0 0.00 0	84 3.65 86	1 0.02 1	12 0.40 10	110 1.80 44	23 0.48 12	50 1.41 34	0.5 3.0 1.30	--	--	--	260 240	
01S/04W-16R03S 11/03/67 900	36	5050	94 --	--	--	--	--	--	--	--	--	--	--	--	1.30	--	--	
01S/04W-25B03S 04/12/68 --	36	5100	-- 7.9	960	84 4.19 41	33 2.71 26	76 3.30 32	2 0.05 0	0 0.00 0	364 5.96 58	111 2.31 22	52 1.47 14	36.0 0.8 0.24	--	--	--	578 574	
01S/04W-25B06S 04/12/68 --	36	5100	-- 7.9	908	83 4.14 42	29 2.38 24	76 3.30 33	2 0.05 0	0 0.00 0	347 5.69 57	113 2.35 24	48 1.35 14	33.0 0.7 0.29	--	--	--	563 556	
01S/04W-25B09S 04/12/68 --	36	5100	-- 8.1	698	62 3.09 43	14 1.15 16	68 2.96 41	2 0.05 1	0 0.00 0	281 4.60 63	55 1.14 16	41 1.16 16	24.0 0.7 0.04	--	--	--	400 405	
04/12/68 --	36	5100	-- 8.2	603	74 3.69 60	12 0.99 16	33 1.43 23	3 0.08 1	0 0.00 0	210 3.44 55	55 1.14 18	26 0.73 12	55.0 0.9 0.04	--	--	--	374 363	
01S/04W-25C01S 05/28/68 --	36	5050	68 8.5	983	89 4.44 44	23 1.89 19	82 3.57 36	3 0.08 1	6 0.20 2	340 5.57 56	110 2.29 23	49 1.38 14	36.0 0.7 0.20	--	--	--	594 567	
01S/04W-25G01S 04/12/68 --	36	5100	-- 8.1	939	78 3.89 42	20 1.64 18	82 3.57 39	2 0.05 1	0 0.00 0	300 4.92 53	101 2.10 23	48 1.35 15	56.0 0.7 0.18	--	--	--	568 536	
01S/04W-25H04S 04/12/68 --	36	5100	-- 8.0	916	92 4.59 53	16 1.31 15	60 2.61 30	3 0.08 1	0 0.00 0	273 4.47 52	108 2.25 26	50 1.41 16	33.0 0.8 0.08	--	--	--	570 498	

TABLE E-1

MINERAL ANALYSES OF GROUND WATER

SOUTHERN CALIFORNIA

WELL NO. DATE	COUNTY	LAB SAMPLER	TEMP PH	EC	MINERAL CONSTITUENTS IN										MILLIGRAMS PER LITER					TDS 180C (*105C) SUM	TH NCH
					CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SI02	MILLIEQUIVALENTS PER LITER PERCENT REACTANCE VALUES				
SANTA ANA RIVER HYDRO SUBAREA					Y01E0										Y01E2						
BUNKER HILL HYDRO SUBAREA					Y01E2										Y01E0						
4/03W-27N01S 5/27/68 --	36	5050	-- 7.8	364	32 1.60 46	7 0.57 17	28 1.22 35	2 0.05 1	0 0.00 0	115 1.88 57	37 0.77 23	12 0.34 10	19.0 0.31 9	1.4	0.10	--	232 195	109 14			
4/04W-06801S 3/12/68 825	36	5050	70 7.4	585	62 3.09 48	28 2.30 36	21 0.91 14	6 0.15 2	-- 4.64 74	283 1.19 19	57 0.39 6	14 0.08 1	5.1 0.08 1	1.4	0.00	--	349 334	270 38			
4/04W-11LS1S 2/12/68 1530	36	5050	178 8.0	1478	23 1.15 9	0 0.00 0	271 11.79 88	17 0.43 3	-- 1.21 9	74 10.03 75	482 2.11 16	75 0.00 0	0.0 0.00 0	6.3	2.46	--	1012 914	57 0			
4/04W-13N05S 3/29/68 1320	36	5050	-- 7.6	683	94 4.69 63	19 1.56 21	25 1.09 15	2 0.05 1	-- 3.57 47	218 2.73 36	131 0.73 10	26 0.55 7	34.0 0.55 7	0.6	0.09	--	464 439	313 134			
4/04W-25A01S 5/29/68 --	36	5050	-- 8.1	597	43 2.14 37	10 0.82 14	64 2.78 48	1 0.02 0	0 0.00 0	148 2.42 43	94 1.96 35	20 0.56 10	41.0 0.66 12	2.2	0.30	--	375 349	148 27			
4/04W-25C02S 1/12/68 --	33	5100	-- 8.3	954	77 3.84 38	29 2.38 24	86 3.74 37	2 0.05 0	5 0.17 2	334 5.47 53	103 2.14 21	51 1.44 14	62.0 1 10	0.8	0.08	--	593 581	312 29			
4/04W-29E01S 3/14/68 --	36	5050	-- 7.7	483	67 3.34 67	12 0.99 20	13 0.56 11	3 0.08 1	-- 3.80 75	232 0.62 12	30 0.37 7	13 0.31 6	19.0 0.31 6	0.6	0.04	--	301 272	217 18			
5/29/68 --	36	5050	65 8.2	512	70 3.49 68	12 0.99 19	14 0.61 12	3 0.08 1	0 0.00 0	232 3.80 75	32 0.67 13	8 0.22 4	21.0 0.34 7	0.5	0.00	--	314 275	224 34			
1/29/68 1050	36	5050	-- 7.6	496	65 3.24 64	15 1.23 24	13 0.56 11	2 0.05 1	-- 3.83 73	234 0.75 14	36 0.31 6	11 0.39 7	24.0 0.39 7	0.5	0.02	--	280 282	224 32			
4/04W-29F01S 1/14/68 --	36	5050	-- 7.3	1077	199 9.93 71	36 2.96 21	24 1.04 7	5 0.13 1	-- 4.78 34	292 7.58 54	364 0.96 7	34 0.61 4	38.0 0.61 4	0.6	1.18	--	924 846	645 406			
5/29/68 --	36	5050	-- 8.2	569	76 3.79 66	15 1.23 21	15 0.65 11	4 0.10 2	0 0.00 0	232 3.80 68	53 1.10 20	10 0.28 5	26.0 0.42 7	0.5	0.00	--	334 314	251 61			
5/29/68 1105	36	5050	-- 7.3	1046	156 7.78 64	35 2.88 24	31 1.35 11	4 0.10 1	-- 4.60 39	281 5.95 50	286 0.82 7	29 0.55 5	34.0 0.55 5	0.5	0.80	--	757 715	534 303			
4/04W-29P02S 2/29/68 --	36	5050	66 8.3	726	104 5.19 70	17 1.40 19	17 0.74 10	4 0.10 1	0 0.00 0	234 3.83 53	106 2.21 30	19 0.53 7	40.0 0.64 9	0.5	0.10	--	482 423	330 138			
4/05W-02A01S 3/30/68 --	36	5050	-- 7.9	477	50 2.49 52	14 1.15 24	26 1.13 23	1 0.02 0	0 0.00 0	232 3.80 76	36 0.75 15	12 0.34 7	7.0 0.11 2	1.0	0.00	--	292 262	182 0			
4/03W-26E01S 1/12/68 --	33	5100	-- 7.0	197	21 1.05 52	7 0.57 28	8 0.35 17	2 0.05 2	0 0.00 0	93 1.52 79	3 0.06 3	9 0.25 13	5.7 0.09 5	0.0	0.00	--	105 102	81 5			
4/03W-27D01S 1/12/68 --	36	5100	-- 6.8	234	24 1.20 51	6 0.49 21	14 0.61 26	2 0.05 2	0 0.00 0	103 1.69 72	8 0.17 7	16 0.45 19	3.0 0.05 2	0.0	0.01	--	119 124	85 0			
4/04W-19A01S 1/05/68 --	36	5100	-- 6.2	122	9 0.45 42	3 0.25 23	8 0.35 32	1 0.02 2	0 0.00 0	37 0.61 57	5 0.10 10	7 0.20 18	10.0 0.16 15	0.0	0.01	--	54 62	35 4			
4/04W-30H01S 2/27/68 1030	36	5050	64 7.1	259	32 1.60 62	6 0.49 19	9 0.39 15	4 0.10 4	-- 1.82 69	111 0.64 24	31 0.17 6	6 0.01 0	0.7 0.01 0	0.2	0.00	--	134 144	105 14			
4/04W-31N02S 1/12/68 815	36	5050	68 7.3	610	63 3.14 46	33 2.71 40	20 0.87 13	5 0.13 2	-- 4.52 68	276 1.81 27	87 0.34 5	12 0.00 0	0.0 0.00 0	1.2	0.00	--	385 357	293 67			
4/05W-34A01S 3/30/68 --	36	5050	-- 8.0	638	85 4.24 64	16 1.31 20	23 1 15	2 0.05 1	0 0.00 0	307 5.03 77	56 1.16 18	10 0.28 4	3.7 0.06 1	1.8	0.00	--	350 349	278 26			
REOLANDS HYDRO SUBAREA					Y01E3																
4/03W-13P02S 2/27/68 --	36	5050	-- 8.2	631	84 4.19 68	14 1.15 19	17 0.74 12	4 0.10 2	0 0.00 0	202 3.31 55	55 1.14 19	12 0.34 6	75.0 1.21 20	0.7	0.00	--	366 361	267 102			
4/03W-04E01S 2/24/68 --	36	5100	-- 8.4	819	53 2.64 31	21 1.73 20	92 4.00 47	3 0.08 1	2 0.07 1	310 5.08 59	60 1.25 15	62 1.75 20	26.0 0.42 5	0.7	0.00	--	474 473	219 0			

TABLE E-1

MINERAL ANALYSES OF GROUND WATER

SOUTHERN CALIFORNIA

STATE WELL NO. DATE	COUNTY	LAB SAMPLER	TEMP PH	EC	MINERAL CONSTITUENTS IN				MILLIGRAMS PER LITER MILLIEQUIVALENTS PER LITER PERCENT REACTANCE VALUES				MILLIGRAMS PER LITER				TDS 180C (*105C) SUM	
					CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SI02		
UPPER SANTA ANA R HYDRO SUBAREA					Y01E0													
RESERVIOR HYDRO SUBAREA					Y01E5													
01S/03W-35H03S	36	5050	--	590	58	14	41	2	0	205	52	13	56.0	0.5	0.00	--	352	
05/28/68	--	--	8.2		2.89	1.15	1.78	0.05	0.00	3.36	1.08	0.37	0.90				338	
					49	20	30	1	0	59	19	6	16					
MILL CREEK HYDRO SUBAREA					Y01E8													
01S/02W-14L01S	36	5050	--	483	66	10	18	2	0	208	53	6	6.1	0.8	0.00	--	283	
05/27/68	--	--	8.3		3.29	0.82	0.78	0.05	0.00	3.41	1.10	0.17	0.10				265	
					66	17	16	1	0	71	23	3	2					
SYCAMORE HYDRO SUBAREA					Y01E9													
01N/05W-23A02S	36	5050	--	506	64	15	20	3	--	239	52	12	5.0	0.5	0.00	--	280	
10/04/67	1130	--	8.1		3.19	1.23	0.87	0.08	--	3.92	1.08	0.34	0.08				289	
					59	23	16	1		72	20	6	1					
	36	5050	--	512	67	16	19	3	--	241	52	13	9.0	0.4	0.02	--	315	
03/17/68	--	--	7.8		3.34	1.31	0.83	0.08	--	3.95	1.08	0.37	0.14				298	
					60	24	15	1		71	19	7	3					
	36	5050	--	503	66	16	19	2	--	241	57	13	12.0	0.6	0.02	--	310	
08/29/68	1000	--	7.6		3.29	1.31	0.83	0.05	--	3.95	1.19	0.37	0.19				305	
					60	24	15	1		69	21	6	3					
SAN TIMOTEO HYDRO SUBUNIT					Y01F0													
YUCAIPA HYDRO SUBAREA					Y01F1													
02S/02W-04L01S	36	5100	--	448	59	12	24	2	0	237	38	5	6.2	0.6	0.00	--	257	
12/01/67	--	--	8.3		2.94	0.99	1.04	0.05	0.00	3.88	0.79	0.14	0.10				264	
					59	20	21	1	0	79	16	3	2					
	36	5100	--	464	61	12	22	2	0	222	42	10	6.7	0.5	0.00	--	264	
06/25/68	--	--	7.9		3.04	0.99	0.96	0.05	0.00	3.64	0.87	0.28	0.11				266	
					60	20	19	1	0	74	18	6	2					
02S/02W-08K01S	36	5100	--	418	30	7	51	2	0	188	34	17	1.8	0.5	0.04	--	254	
12/01/67	--	--	8.0		1.50	0.57	2.22	0.05	0.00	3.08	0.71	0.48	0.03				236	
					34	13	51	1	0	72	16	11	1					
02S/02W-08K02S	36	5100	--	418	30	7	51	2	0	188	34	17	1.8	0.5	0.04	--	254	
12/01/67	--	--	8.0		1.50	0.57	2.22	0.05	0.00	3.08	0.71	0.48	0.03				236	
					34	13	51	1	0	72	16	11	1					
	36	5100	--	461	40	8	48	1	0	220	26	21	3.2	0.6	0.02	--	195	
06/24/68	--	--	7.8		1.99	0.66	2.09	0.02	0.00	3.60	0.54	0.59	0.05				256	
					42	14	44	0	0	75	11	12	1					
SAN TIMOTEO HYDRO SUBAREA					Y01F2													
02S/01W-30E01S	33	5050	64	412	41	16	20	1	--	208	9	19	6.0	0.6	0.01	--	203	
04/30/68	1010	--	8.1		2.04	1.31	0.87	0.02	--	3.41	0.19	0.53	0.10				215	
					48	31	20	1		81	4	13	2					
02S/01W-34Q01S	33	5050	60	398	38	17	19	1	--	219	10	9	4.0	0.5	0.00	--	222	
04/23/68	1000	--	8.0		1.90	1.40	0.83	0.02	--	3.59	0.21	0.25	0.06				207	
					46	34	20	1		87	5	6	2					
02S/02W-15801S	36	5100	--	530	41	12	59	1	0	214	58	26	5.8	1.3	0.04	--	319	
12/01/67	--	--	8.1		2.04	0.99	2.57	0.02	0.00	3.51	1.21	0.73	0.09				310	
					36	17	46	0	0	63	22	13	2					
	36	5100	--	533	42	11	59	2	0	210	61	29	6.6	1.5	0.05	--	310	
06/25/68	--	--	7.4		2.09	0.90	2.57	0.05	0.00	3.44	1.27	0.82	0.11				316	
					37	16	46	1	0	61	22	14	2					
02S/02W-24E02S	33	5050	72	387	25	10	42	1	--	179	13	19	7.3	0.6	0.00	--	222	
04/30/68	1100	--	7.8		1.25	0.82	1.83	0.02	--	2.93	0.27	0.53	0.12				206	
					32	21	47	1		76	7	14	3					
02S/02W-25D01S	33	4103	62	493	41	21	33	1	0	262	20	20	5.0	0.6	0.00	--	275	
10/09/67	--	--	8.0		2.04	1.73	1.43	0.02	0.00	4.29	0.42	0.56	0.08				271	
					39	33	27	0	0	80	8	10	1					
02S/02W-35D01S	33	4103	68	371	27	7	43	1	0	181	14	18	1.0	1.3	0.00	--	207	
10/09/67	--	--	8.2		1.35	0.57	1.87	0.02	0.00	2.97	0.29	0.51	0.02				202	
					35	15	49	1	0	78	8	13	0					
	33	5050	66	370	28	7	40	1	--	178	15	16	0.5	1.6	0.01	--	210	
04/30/68	1130	--	8.0		1.40	0.57	1.74	0.02	--	2.92	0.31	0.45	0.01				197	
					37	15	46	1		79	8	12	0					
02S/03W-10802S	36	5100	--	487	29	9	63	2	0	200	26	30	13.0	0.4	0.04	--	252	
12/20/67	--	--	7.6		1.45	0.74	2.74	0.05	0.00	3.28	0.54	0.85	0.21				271	
					29	15	55	1	0	67	11	17	4					
	36	5100	--	468	26	9	63	2	0	195	23	31	12.0	1.1	0.04	--	254	
12/22/67	--	--	7.7		1.30	0.74	2.74	0.05	0.00	3.20	0.48	0.87	0.19				263	
					27	15	57	1	0	67	10	18	4					
03S/01W-03K01S	33	5050	61	395	39	17	19	1	--	216	11	9	4.0	0.4	0.01	--	227	
04/23/68	945	--	8.0		1.95	1.40	0.83	0.02	--	3.54	0.23	0.25	0.06				207	
					46	33	20	1		87	6	6	2					

TABLE E-1

MINERAL ANALYSES OF GROUND WATER

SOUTHERN CALIFORNIA

WELL NO.	COUNTY	LAB SAMPLER	TEMP PH	EC	MINERAL CONSTITUENTS IN MILLIEQUIVALENTS PER LITER								MILLIGRAMS PER LITER				TDS 180C (*105C) SUM	TH NCH	
					CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SI02			
TIMOTEO HYDRO SUBUNIT SAN TIMOTEO HYDRO SUBAREA					Y01F0	SANTA ANA RIVER HYDRO UNIT								Y0100					
					Y01F2														
01W-03K035	33	4103	63	365	35	14	21	2	0	200	10	13	3.5	0.4	0.00	--	184	145	
10/67	--	--	8.1		1.75	1.15	0.91	0.05	0.00	3.28	0.21	0.37	0.06				198	0	
					45	30	24	1	0	84	5	9	1						
01W-05Q015	33	5050	70	413	3	1	83	3	6	133	5	40	15.0	0.7	0.01	--	234	12	
30/68	930	--	8.4		0.15	0.08	3.61	0.08	0.20	2.18	0.10	1.13	0.24				223	0	
					4	2	92	2	5	57	3	29	6						
01W-09Q015	33	4103	70	312	31	9	20	2	0	158	2	16	6.0	0.6	0.00	--	187	114	
09/67	--	--	8.1		1.55	0.74	0.87	0.05	0.00	2.59	0.04	0.45	0.10				165	0	
					48	23	27	2	0	81	1	14	3						
30/68	945	33	5050	62	314	30	9	20	2	--	157	2	14	7.8	0.6	0.02	--	183	112
			8.0		1.50	0.74	0.87	0.05		2.57	0.04	0.39	0.12				163	0	
					47	23	27	2		82	1	13	4						
CHERRY VALLEY HYDRO SUBAREA					Y01F3														
01W-22A03S	33	5050	60	419	46	14	19	1	--	171	41	13	8.3	0.6	0.00	--	253	172	
23/68	1045	--	7.6		2.29	1.15	0.83	0.02		2.80	0.85	0.37	0.13				227	32	
					53	27	19	1		67	20	9	3						
01W-27B01S	33	4103	62	538	47	20	39	2	0	234	61	22	6.0	0.9	0.02	--	313	200	
10/67	--	--	8.1		2.34	1.64	1.70	0.05	0.00	3.83	1.27	0.62	0.10				313	8	
					41	29	30	1	0	66	22	11	2						
23/68	1015	33	5050	63	537	50	19	37	2	--	229	59	17	7.5	0.9	0.01	--	314	203
			8.0		2.49	1.56	1.61	0.05		3.75	1.23	0.48	0.12				305	15	
					44	27	28	1		67	22	9	2						
02W-14M01S	33	4103	76	376	14	5	61	1	7	136	17	30	3.5	0.8	0.00	--	201	55	
09/67	--	--	8.4		0.70	0.41	2.65	0.02	0.23	2.23	0.35	0.85	0.06				207	0	
					18	11	70	1	6	60	9	23	1						
30/68	1040	33	5050	82	379	17	5	57	1	--	153	15	28	5.3	0.7	0.00	--	222	63
			8.2		0.85	0.41	2.48	0.02		2.51	0.31	0.79	0.08				205	0	
					22	11	66	1		68	8	21	2						
02W-24E02S	33	4103	74	332	14	7	46	1	0	146	15	19	4.0	0.7	0.00	--	179	64	
09/67	--	--	8.1		0.70	0.57	2	0.02	0.00	2.39	0.31	0.53	0.06				179	0	
					21	17	61	1	0	72	9	16	2						
CHICKEN HILL HYDRO SUBAREA					Y01F4														
02W-15A03S	36	5100	--	542	41	12	61	2	0	217	74	19	7.3	1.9	0.00	--	336	152	
01/67	--	--	8.3		2.04	0.99	2.65	0.05	0.00	3.56	1.54	0.53	0.12				325	0	
					36	17	46	1	0	62	27	9	2						
25/68	--	36	5100	--	529	44	11	61	2	0	212	66	24	7.6	1.8	0.09	--	316	155
			7.8		2.19	0.90	2.65	0.05	0.00	3.47	1.37	0.68	0.12				322	0	
					38	16	46	1	0	61	24	12	2						
GATEWAY HYDRO SUBAREA					Y01F5														
02W-25K01S	36	5100	--	546	47	11	56	2	0	237	61	16	8.4	0.5	0.06	--	337	163	
01/67	--	--	8.1		2.34	0.90	2.43	0.05	0.00	3.88	1.27	0.45	0.13				319	0	
					41	16	42	1	0	68	22	8	2						
25/68	--	36	5100	--	569	57	11	55	2	0	261	60	12	8.9	3.3	0.03	--	341	188
			7.9		2.84	0.90	2.39	0.05	0.00	4.28	1.25	0.34	0.14				338	0	
					46	15	39	1	0	71	21	6	2						
SOUTH MESA HYDRO SUBAREA					Y01F7														
01W-31H01S	36	5100	--	483	59	13	28	2	0	239	36	14	13.0	0.5	0.00	--	278	201	
01/67	--	--	8.3		2.94	1.07	1.22	0.05	0.00	3.92	0.75	0.39	0.21				283	5	
					56	20	23	1	0	74	14	7	4						
25/68	--	36	5100	--	480	60	13	28	2	0	229	35	17	14.0	0.5	0.01	--	286	203
			7.7		2.99	1.07	1.22	0.05	0.00	3.75	0.73	0.48	0.22				283	15	
					56	20	23	1	0	72	14	9	4						
02W-12M01S	36	5100	--	452	31	9	59	2	0	200	41	22	1.0	1.2	0.00	--	241	114	
01/67	--	--	8.3		1.55	0.74	2.57	0.05	0.00	3.28	0.85	0.62	0.02				265	0	
					31	15	52	1	0	69	18	13	0						
25/68	--	36	5100	--	452	36	9	56	1	0	198	38	25	6.7	0.3	0.00	--	277	127
			8.0		1.80	0.74	2.43	0.02	0.00	3.24	0.79	0.70	0.11				270	0	
					36	15	49	0	0	67	16	14	2						
02W-14C01S	36	5100	--	547	43	11	64	1	0	214	71	23	7.1	1.3	0.01	--	348	153	
01/67	--	--	8.1		2.14	0.90	2.78	0.02	0.00	3.51	1.48	0.65	0.11				327	0	
					37	15	47	0	0	61	26	11	2						
25/68	--	36	5100	--	545	45	12	58	2	0	215	61	24	7.7	0.4	0.02	--	321	162
			7.8		2.24	0.99	2.52	0.05	0.00	3.52	1.27	0.68	0.12				316	0	
					39	17	43	1	0	63	23	12	2						
02W-14D01S	36	5100	--	529	43	11	59	2	0	217	67	18	7.1	1.6	0.00	--	331	153	
01/67	--	--	8.3		2.14	0.90	2.57	0.05	0.00	3.56	1.39	0.51	0.11				316	0	
					38	16	45	1	0	64	25	9	2						

TABLE E-1
MINERAL ANALYSES OF GROUND WATER

SOUTHERN CALIFORNIA

STATE WELL NO. DATE	COUNTY	LAB. TIME	TEMP. SAMPLER PH	EC	MINERAL CONSTITUENTS IN				MILLIGRAMS PER LITER MILLIEQUIVALENTS PER LITER PERCENT REACTANCE VALUES				MILLIGRAMS PER LITER				TDS 180C (*105C) SUM				
					CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SI02					
					SANTA ANA RIVER HYDRO UNIT								Y0100								
SAN TIMOTEO HYDRO SUBUNIT					Y01F0																
SOUTH MESA HYDRO SUBAREA					Y01F7																
02S/02W-14D01S	36	5100	--	534	44	12	57	2	0	217	59	30	6.8	1.5	0.03	--	307				
06/25/68	--	--	7.8		2.19	0.99	2.48	0.05	0.00	3.56	1.23	0.85	0.11				319				
					38	17	43	1	0	62	21	15	2								
NOBIE CREEK HYDRO SUBAREA					Y01F9																
02S/01W-22A03S	33	4103	63	437	47	16	18	2	0	171	57	17	8.5	0.6	0.01	--	249				
10/10/67	--	--	8.1		2.34	1.31	0.78	0.05	0.00	2.80	1.19	0.48	0.14				251				
					52	29	17	1	0	61	26	10	3								
02S/01W-22H01S	33	4103	61	512	59	17	23	2	0	248	35	24	6.0	0.6	0.00	--	275				
10/10/67	--	--	7.9		2.94	1.40	1	0.05	0.00	4.06	0.73	0.68	0.10				289				
					55	26	18	1	0	73	13	12	2								
02S/01W-22H02S	33	4103	61	448	46	16	22	2	0	203	38	19	4.0	0.6	0.00	--	242				
10/10/67	--	--	8.1		2.29	1.31	0.96	0.05	0.00	3.33	0.79	0.53	0.06				248				
					50	28	21	1	0	70	17	11	1								
04/23/68	33	5050	60	457	49	16	21	2	--	200	37	16	5.0	0.6	0.00	--	266				
1030	--	--	8.1		2.44	1.31	0.91	0.05	--	3.28	0.77	0.45	0.08				245				
					52	28	19	1		72	17	10	2								
SAN BERNARDINO MTN HYDRO SUBUNIT					Y01G0																
BEAR VALLEY HYDRO SUBAREA					Y01G1																
02N/02E-19A01S	36	5050	--	284	28	14	10	1	0	161	7	5	0.5	0.2	0.00	--	171				
04/15/68	--	--	7.8		1.40	1.15	0.43	0.02	0.00	2.64	0.14	0.14	0.01				145				
					46	38	14	1	0	90	5	5	0								
02N/01W-01L01S	36	5100	--	427	65	13	9	2	0	266	5	5	0.6	0.2	0.00	--	247				
04/16/68	--	--	7.6		3.24	1.07	0.39	0.05	0.00	4.36	0.10	0.14	0.01				231				
					68	22	8	1	0	94	2	3	0								
BALDWIN HYDRO SUBAREA					Y01G3																
02N/01E-24E01S	36	5050	--	444	70	14	7	1	--	283	1	10	1.0	0.1	0.00	--	185				
05/23/68	1330	--	7.6		3.49	1.15	0.30	0.02	--	4.64	0.02	0.28	0.02				244				
					70	23	6	0		94	0	6	0								
02N/02E-08C01S	36	5050	--	911	81	27	83	5	--	269	195	35	20.0	0.6	0.04	--	572				
05/23/68	1430	--	7.3		4.04	2.22	3.61	0.13	--	4.41	4.06	0.99	0.32				579				
					40	22	36	1		45	41	10	3								
02N/02E-19A02S	36	5050	--	300	28	16	11	2	--	167	12	10	0.0	0.4	0.00	--	129				
05/23/68	1245	--	7.0		1.40	1.31	0.48	0.05	--	2.74	0.25	0.28	0.00				162				
					43	41	15	2		84	8	9	0								
PERRIS HYDRO SUBUNIT					Y02A0																
PERRIS VALLEY HYDRO SUBAREA					Y02A1																
03S/04E-22A02S	33	5050	78	365	9	0	68	2	--	94	59	20	2.0	0.4	0.03	--	192				
04/15/68	1135	--	8.1		0.45	0.00	2.96	0.05	--	1.54	1.23	0.56	0.03				207				
					13	0	85	1		46	36	17	1								
03S/03W-06H01S	33	5050	71	1170	91	37	63	5	0	90	27	231	95.0	0.4	0.00	--	808				
05/16/68	--	--	8.1		4.54	3.04	2.74	0.13	0.00	1.47	0.56	6.51	1.53				594				
					43	29	26	1	0	15	6	65	15								
03S/03W-29E01S	33	5050	--	577	22	5	85	9	--	85	13	114	14.0	1.1	0.79	--	310				
04/25/68	1335	--	7.7		1.10	0.41	3.70	0.23	--	1.39	0.27	3.21	0.22				306*				
					20	8	68	4		27	5	63	4								
03S/03W-32H02S	33	4103	76	553	29	6	67	2	0	74	20	110	13.0	1.1	0.73	--	316				
10/04/67	--	--	7.9		1.45	0.49	2.91	0.05	0.00	1.21	0.42	3.10	0.21				286				
					29	10	59	1	0	24	8	63	4								
04S/03W-06Q01S	33	5050	--	858	52	11	121	3	--	80	26	207	16.0	0.8	0.51	--	556				
04/25/68	1255	--	8.0		2.59	0.90	5.26	0.08	--	1.31	0.54	5.84	0.26				477*				
					29	10	59	1		16	7	73	3								
04S/03W-07J01S	33	5050	--	1285	102	31	110	7	--	130	29	328	15.0	0.5	0.40	--	1008				
04/25/68	1245	--	8.0		5.09	2.55	4.78	0.18	--	2.13	0.60	9.25	0.24				687				
					40	20	38	1		17	5	76	2								
04S/03W-17A01S	33	5050	--	1936	171	48	166	5	--	204	63	521	18.0	0.6	0.86	--	1449				
04/25/68	1230	--	7.8		8.53	3.95	7.22	0.13	--	3.34	1.31	14.69	0.29				1094				
					43	20	36	1		17	7	75	1								
04S/03W-17J01S	33	4103	76	1519	110	43	121	4	0	147	53	373	15.0	0.6	0.79	--	1285				
10/04/67	--	--	7.9		5.49	3.54	5.26	0.10	0.00	2.41	1.10	10.52	0.24				793				
					38	25	37	1	0	17	8	74	2								
04S/03W-21F01S	33	5050	--	1560	140	32	140	8	--	99	41	467	20.0	0.6	0.39	--	1204				
04/25/68	1210	--	7.9		6.98	2.63	6.09	0.20	--	1.62	0.85	13.17	0.32				898				
					44	16	38	1		10	5	82	2								
04S/03W-24P01S	33	5050	77	710	43	12	74	4	--	126	15	133	23.6	0.3	0.12	--	409				
05/13/68	830	--	8.0		2.14	0.99	3.22	0.10	--	2.06	0.31	3.75	0.38				367				
					33	15	50	2		32	5	58	6								

TABLE E-1

MINERAL ANALYSES OF GROUND WATER

SOUTHERN CALIFORNIA

WELL NO. DATE	COUNTY	LAB SAMPLER	TEMP PH	EC	MINERAL CONSTITUENTS IN													TDS 180C (*105C) SUM	TH NCH
					MILLIGRAMS PER LITER														
					PERCENT REACTANCE VALUES														
					SAN JACINTO VALLEY HYDRO UNIT														
					Y02A0						Y0200								
					PERRIS VALLEY HYDRO SUBAREA						Y02A1								
5/03W-26F01S 0/06/67	33	4103	-- 7.8	5747	443 22.10 36	121 9.95 16	649 28.23 47	12 0.31 0	0 0.00 0	88 1.44 2	259 5.39 9	1892 53.35 88	7.0 0.11 0	0.4	1.70	--	3947 3429	1604 1532	
4/25/68 1145	33	5050	-- 7.4	6600	593 29.59 41	112 9.21 13	763 33.19 46	11 0.28 0	-- 1.47 2	90 5.95 8	286 63.45 89	2250 0.04 0	2.5 0.04 0	0.4	1.63	--	4682 4064	1942 1868	
5/03W-26J01S 0/06/67	33	4103	-- 7.8	1779	62 3.09 19	5 0.41 2	299 13.01 78	5 0.13 1	0 0.00 0	60 0.98 6	43 0.89 5	525 14.80 88	7.5 0.12 1	0.5	0.50	--	1011 977	175 126	
4/25/68 1135	33	5050	-- 7.6	1800	73 3.64 22	2 0.16 1	290 12.61 76	3 0.08 0	-- 1.00 6	61 0.92 5	44 14.41 87	511 0.21 1	13.0 0.21 1	0.5	0.47	--	1016 967	190 140	
5/03W-28H01S 4/25/68 1200	33	5050	-- 7.6	2860	242 12.07 40	87 7.15 24	248 10.79 36	3 0.08 0	-- 3.83 13	234 2.91 10	140 21.97 74	779 0.85 3	53.0 0.85 3	0.6	0.26	--	2227 1668	962 770	
5/04W-24A01S 0/04/67	33	4103	78 7.9	1060	76 3.79 34	32 2.63 24	103 4.48 41	5 0.13 1	0 0.00 0	137 2.24 21	285 5.93 55	93 2.62 24	2.0 0.03 0	0.6	0.17	--	720 665	321 209	
4/25/68 1310	33	5050	-- 8.0	1084	70 3.49 30	40 3.29 28	107 4.65 40	8 0.20 2	-- 2.47 21	151 6.04 52	290 2.93 25	104 0.06 1	4.0 0.06 1	0.5	0.15	--	714 698	339 216	
5/03W-03R01S 5/17/68	33	5050	80 8.8	1180	75 3.74 37	10 0.82 8	125 5.44 54	3 0.08 1	4 0.13 1	65 1.06 11	22 0.46 4	296 8.35 83	5.0 0.08 1	1.0	0.60	--	640 574	228 168	
					MENIFEE HYDRO SUBAREA						Y02A2								
5/03W-21D01S 4/23/68 1250	33	5050	76 7.6	2950	361 18.01 61	82 6.74 23	109 4.74 16	7 0.18 1	-- 2.74 9	167 2.91 10	140 24.17 80	857 0.37 1	23.0 0.37 1	0.3	0.05	--	2512 1662	1239 1095	
5/03W-35P01S 5/17/68	33	5050	-- 8.0	3170	191 9.53 30	55 4.52 14	406 17.66 55	6 0.15 0	0 0.00 0	311 5.10 16	427 8.89 28	620 17.48 55	10.0 0.16 0	0.3	0.60	--	2060 1869	703 448	
5/03W-36D02S 5/17/68	33	5050	-- 8.1	1380	114 5.69 42	42 3.45 26	97 4.22 31	4 0.10 1	0 0.00 0	122 2.00 15	220 4.58 35	230 6.49 49	9.6 0.15 1	0.4	0.10	--	949 778	457 357	
5/03W-02F01S 5/17/68	33	5050	-- 7.7	797	61 3.04 39	24 1.97 25	63 2.74 35	3 0.08 1	0 0.00 0	162 2.65 35	105 2.19 29	86 2.42 32	22.0 0.35 5	0.4	0.00	--	522 444	251 118	
5/03W-16C01S 4/23/68 1200	33	5050	58 7.9	969	53 2.64 28	27 2.22 23	103 4.48 47	7 0.18 2	-- 1.31 14	80 5.58 58	268 2.68 28	95 0.02 0	1.0 0.02 0	0.5	0.10	--	618 594	243 178	
5/03W-20C01S 4/23/68 1145	33	5050	60 7.5	574	45 2.24 41	18 1.48 27	40 1.74 31	2 0.05 1	-- 2.61 47	159 0.54 10	26 1.80 33	64 0.58 10	36.0 0.58 10	0.4	0.03	--	346 310	186 56	
					WINCHESTER HYDRO SUBAREA						Y02A3								
5/02W-03M01S 4/23/68 1410	33	5050	70 8.2	774	28 1.40 17	41 3.37 42	71 3.09 39	4 0.10 1	10 0.33 4	254 4.16 52	51 1.06 13	64 1.80 23	36.0 0.58 7	0.6	0.12	--	485 431	239 14	
5/02W-19N01S 4/23/68 1330	33	5050	78 7.5	735	49 2.44 36	15 1.23 18	70 3.04 45	2 0.05 1	-- 2.20 32	134 0.94 13	45 3.04 44	108 0.74 11	46.0 0.74 11	0.3	0.02	--	480 402	184 57	
5/02W-22G01S 4/23/68 1500	33	5050	70 7.8	667	45 2.24 36	18 1.48 23	57 2.48 39	4 0.10 2	-- 2.65 42	162 0.94 15	45 2.45 39	87 0.29 5	18.0 0.29 5	0.6	0.03	--	401 355	186 37	
5/02W-25C01S 5/16/68	33	5050	-- 8.1	1620	125 6.24 40	25 2.05 13	163 7.09 46	6 0.15 1	0 0.00 0	106 1.74 11	236 4.91 32	298 8.40 55	15.0 0.24 2	0.3	1.50	--	1050 922	415 328	
5/02W-36D01S 5/16/68	33	5050	73 7.9	2710	264 13.17 47	57 4.69 17	226 9.83 35	7 0.18 1	0 0.00 0	215 3.52 13	453 9.43 34	515 14.52 52	15.0 0.24 1	0.2	1.00	--	1970 1644	894 717	
					LAKEVIEW HYDRO SUBAREA						Y02A4								
5/02W-08L01S 5/05/68 1400	33	5050	-- 8.1	1028	54 2.69 28	16 1.31 14	122 5.31 56	5 0.13 1	-- 2.44 26	149 0.73 8	35 6.29 66	223 0.08 1	4.8 0.08 1	0.5	1.80	--	579 536	201 78	
5/02W-17O02S 5/13/68 1040	33	5050	74 7.6	813	54 2.69 36	15 1.23 16	81 3.52 47	4 0.10 1	-- 2.44 32	149 1.06 14	51 3.86 51	137 0.14 2	9.0 0.14 2	0.4	0.89	--	449 426	197 74	
5/02W-18A01S 5/13/68 1100	33	5050	76 7.8	1054	56 2.79 29	17 1.40 14	124 5.39 55	5 0.13 1	-- 2.57 26	157 0.50 5	24 6.60 68	234 0.05 0	3.0 0.05 0	0.5	1.80	--	637 543	210 81	

TABLE E-1

MINERAL ANALYSES OF GROUND WATER

SOUTHERN CALIFORNIA

STATE WELL NO. DATE	COUNTY	LAB SAMPLER	TEMP PH	EC	MINERAL CONSTITUENTS IN				MILLIGRAMS PER LITER MILLIEQUIVALENTS PER LITER PERCENT REACTANCE VALUES				MILLIGRAMS PER LITER				TDS 180C (*105C) SUM	
					CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SI02		
PERRIS HYDRO SUBUNIT					SAN JACINTO VALLEY HYDRO UNIT													
LAKEVIEW HYDRO SUBAREA					Y02A0	Y0200												
04S/02W-18R01S	33	5050	76	1192	60	18	139	5	--	155	12	284	2.3	0.4	1.80	--	743	
05/13/68 1030	--	--	7.5		2.99	1.48	6.05	0.13		2.54	0.25	8.01	0.04				599	
					28	14	57	1		23	2	74	0					
04S/03W-13001S	33	4103	--	772	46	16	80	4	0	135	15	160	3.0	0.2	0.55	--	436	
10/06/67 --	--	--	7.9		2.29	1.31	3.48	0.10	0.00	2.21	0.31	4.51	0.05				392	
					32	18	48	1	0	31	4	64	1					
04/25/68 1030	33	5050	74	774	47	19	77	4	--	134	14	161	5.0	0.4	0.51	--	460	
	--	--	8.0		2.34	1.56	3.35	0.10		2.20	0.29	4.54	0.08				394	
					32	21	45	1		31	4	64	1					
04S/03W-21F01S	33	4103	--	1623	137	30	113	4	0	96	34	417	20.0	0.6	0.40	--	1108	
10/06/67 --	--	--	7.6		6.84	2.47	4.91	0.10	0.00	1.57	0.71	11.76	0.32				804	
					48	17	34	1	0	11	5	82	2					
04S/03W-24P01S	33	5050	--	703	44	12	73	4	--	127	16	132	22.0	0.4	0.06	--	410	
04/25/68 1120	--	--	7.9		2.19	0.99	3.17	0.10		2.08	0.33	3.72	0.35				366	
					34	15	49	2		32	5	57	5					
05/16/68 --	33	5050	76	742	43	13	79	4	2	127	16	132	23.0	0.2	0.10	--	422	
	--	--	8.4		2.14	1.07	3.44	0.10	0.07	2.08	0.33	3.72	0.37				375	
					32	16	51	1	1	32	5	57	6					
04S/03W-25D02S	33	5050	79	3550	260	76	326	8	0	155	295	874	22.0	0.2	2.00	--	2780	
05/16/68 --	--	--	8.2		12.97	6.25	14.18	0.20	0.00	2.54	6.14	24.65	0.35				1940	
					39	19	42	1	0	7	18	73	1					
HEMET HYDRO SUBAREA					Y02A5													
05S/01E-07001S	33	5050	73	653	66	10	50	5	0	187	97	29	25.0	0.6	0.00	--	386	
05/16/68 --	--	--	8.3		3.29	0.82	2.17	0.13	0.00	3.06	2.02	0.82	0.40				375	
					51	13	34	2	0	49	32	13	6					
04S/01W-18N01S	33	5050	--	701	42	11	92	6	--	135	165	44	3.0	0.6	0.21	--	500	
01/26/68 1100	--	--	8.0		2.09	0.90	4.00	0.15		2.21	3.43	1.24	0.05				431	
					29	13	56	2		32	49	18	1					
04S/01W-18N02S	33	5050	--	549	34	9	72	5	--	177	83	30	2.0	0.7	0.08	--	254	
01/26/68 1115	--	--	8.0		1.70	0.74	3.13	0.13		2.90	1.73	0.85	0.03				323	
					30	13	55	2		53	31	15	1					
04S/01W-31D01S	33	4103	--	1880	101	36	228	10	0	141	325	311	6.0	0.9	0.90	--	1157	
10/06/67 --	--	--	8.2		5.04	2.96	9.92	0.25	0.00	2.31	6.77	8.77	0.10				1089	
					28	16	55	1	0	13	38	49	0					
04/25/68 920	33	5050	--	1807	105	30	239	6	--	139	329	337	7.4	0.9	0.96	--	1164	
	--	--	8.0		5.24	2.47	10.40	0.15		2.28	6.85	9.50	0.12				1124	
					29	13	57	1		12	36	51	1					
04S/02W-11C01S	33	4103	--	725	40	7	96	5	0	138	146	57	2.0	0.7	0.30	--	437	
10/06/67 --	--	--	7.8		1.99	0.57	4.17	0.13	0.00	2.26	3.04	1.61	0.03				422	
					29	8	61	2	0	33	44	23	0					
04/25/68 945	33	5050	66	706	40	10	92	5	--	139	151	55	4.0	0.7	0.22	--	418	
	--	--	7.5		1.99	0.82	4.00	0.13		2.28	3.14	1.55	0.06				427	
					29	12	58	2		32	45	22	1					
05S/01W-10P01S	33	5050	76	934	83	19	78	7	--	137	201	77	46.5	0.8	0.04	--	624	
05/02/68 1345	--	--	7.8		4.14	1.56	3.39	0.18		2.24	4.18	2.17	0.75				580	
					45	17	37	2		24	45	23	8					
05S/01W-13C01S	33	5050	76	937	94	25	72	8	--	204	227	61	22.0	0.9	0.05	--	657	
04/24/68 1100	--	--	7.6		4.69	2.05	3.13	0.20		3.34	4.73	1.72	0.35				611	
					46	20	31	2		33	47	17	3					
05S/01W-16A01S	33	5050	94	1553	92	19	194	9	--	124	184	307	10.5	1.8	3.00	--	991	
05/02/68 --	--	--	7.9		4.59	1.56	8.44	0.23		2.03	3.83	8.66	0.17				882	
					31	10	57	1		14	26	59	1					
05S/01W-20B01S	33	5050	74	911	57	36	78	5	--	167	190	71	19.0	0.5	0.05	--	601	
04/24/68 940	--	--	7.7		2.84	2.96	3.39	0.13		2.74	3.95	2.00	0.31				539	
					30	32	36	1		30	44	22	3					
06S/01W-04J02S	33	5050	--	590	33	21	53	2	--	176	61	49	15.0	0.4	0.06	--	370	
04/24/68 1010	--	--	7.6		1.65	1.73	2.30	0.05		2.88	1.27	1.38	0.24				321	
					29	30	40	1		50	22	24	4					
SAN JACINTO HYDRO SUBUNIT					Y02B0													
SAN JACINTO HYDRO SUBAREA					Y02B1													
05S/01E-05M02S	33	5050	120	205	6	0	34	3	18	42	6	14	2.0	0.2	0.16	--	122	
04/24/68 1350	--	--	8.8		0.30	0.00	1.48	0.08	0.60	0.69	0.12	0.39	0.03				104	
					16	0	80	4	33	37	7	21	2					
05S/01E-09J01S	33	5050	62	298	35	4	20	2	--	142	18	14	2.0	0.4	0.00	--	183	
04/24/68 1330	--	--	8.0		1.75	0.33	0.87	0.05		2.33	0.37	0.39	0.03				166	
					58	11	29	2		74	12	13	1					
05S/01E-14G01S	33	5050	80	725	32	12	101	3	--	169	156	40	1.0	0.7	0.23	--	429	
04/24/68 1215	--	--	7.9		1.60	0.99	4.39	0.08		2.77	3.25	1.13	0.02				429	
					23	14	62	1		39	45	16	0					

TABLE E-1
MINERAL ANALYSES OF GROUND WATER

SOUTHERN CALIFORNIA

WELL NO. DATE	COUNTY	LAB SAMPLER	TEMP PH	EC	MINERAL CONSTITUENTS IN				MILLIGRAMS PER LITER MILLIEQUIVALENTS PER LITER PERCENT REACTANCE VALUES				MILLIGRAMS PER LITER				TDS 180C (*105C) SUM	TH MCH
					CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SI02		
SAN JACINTO VALLEY HYDRO UNIT					Y0280		Y0281		Y0200									
JACINTO HYDRO SUBUNIT SAN JACINTO HYDRO SUBAREA																		
01E-17002S /24/68 1200	33	5050	68 7.9	1071	110 5.49 47	31 2.55 22	77 3.35 29	9 0.23 2	-- 3.52 30	215 5.29 46	254 2.23 19	79 0.55 5	34.0	0.9	0.07	--	745 701	402 196
01W-03K01S /10/67 --	33	4103	64 8.1	370	36 1.80 45	14 1.15 29	22 0.96 24	2 0.05 1	0 0.00 0	204 3.34 83	12 0.25 6	13 0.37 9	4.0	0.3	0.00	--	193 204	147 0
01W-03K03S /23/68 930	33	5050	62 8.3	372	37 1.85 47	14 1.15 29	21 0.91 23	1 0.02 1	-- 3.34 85	204 0.23 6	11 0.28 7	10 0.07 2	4.3	0.4	0.00	--	200 199	150 --
02W-07P01S /04/67 --	33	4103	76 8.5	940	6 0.30 3	3 0.25 3	206 8.96 94	0 0.00 0	14 0.47 5	342 5.60 60	22 0.46 5	90 2.54 27	15.0	4.0	0.60	--	561 529	27 0
02/25/68 1445	33	5050	-- 8.4	965	7 0.35 3	3 0.25 2	218 9.48 93	3 0.08 1	16 0.53 5	353 5.78 60	20 0.42 4	94 2.65 27	15.0	3.9	0.56	--	542 554#	30 0
01W-16C01S /06/67 --	33	4103	-- 8.0	386	32 1.60 41	3 0.25 6	44 1.91 50	4 0.10 3	0 0.00 0	200 3.28 84	2 0.04 1	17 0.48 12	6.0	0.8	0.03	--	227 208	92 0
01W-16G01S /25/68 850	33	5050	74 8.0	376	32 1.60 39	5 0.41 10	46 2 49	2 0.05 1	-- 3.23 81	9 0.19 5	17 0.48 12	6.0	0.8	0.00	--	212 215	100 0	
01W-25G01S /15/68 930	33	5050	73 8.1	708	77 3.84 53	12 0.99 14	54 2.35 32	3 0.08 1	0 0.00 0	223 3.65 52	125 2.60 37	29 0.82 12	0.0	0.5	0.10	--	411 411	242 59
01W-26R01S /15/68 1130	33	5050	-- 8.3	296	37 1.85 57	5 0.41 13	21 0.91 28	3 0.08 2	0 0.00 0	160 2.62 85	8 0.17 5	10 0.28 9	1.0	0.3	0.00	--	168 164#	113 0
01W-35G01S /06/67 --	33	4103	-- 8.1	338	33 1.65 46	11 0.90 25	21 0.91 26	4 0.10 3	0 0.00 0	184 3.01 84	9 0.19 5	13 0.37 10	1.0	0.8	0.00	--	201 184	128 0
02/24/68 1445	33	5050	62 8.0	305	38 1.90 60	4 0.33 10	20 0.87 27	3 0.08 2	-- 2.65 84	8 0.17 5	12 0.34 11	0.0	0.3	0.00	--	162 165	111 0	
01/15/68 1530	33	5050	94 8.2	322	38 1.90	5 0.41	24 1.04	3 0.08	0 0.00	-- --	-- --	-- --	--	--	0.00	--	--	115 --
02W-02C01S /16/68 --	33	5050	70 8.0	660	34 1.70 15	56 4.60 41	110 4.78 43	3 0.08 1	0 0.00 0	382 6.26 92	1 0.02 0	14 0.39 6	9.4	0.4	0.20	--	365 416#	315 2
01W-01C01S /06/67 --	33	4103	-- 8.2	397	37 1.85 46	9 0.74 18	30 1.30 32	5 0.13 3	0 0.00 0	167 2.74 68	36 0.75 19	18 0.51 13	1.5	0.3	0.00	--	242 219	129 0
01W-01G01S /24/68 1415	33	5050	68 7.7	403	47 2.34 55	6 0.49 12	30 1.30 31	4 0.10 2	-- 2.77 66	169 0.92 22	44 0.48 11	17 0.03 1	2.0	0.4	0.00	--	227 234	142 3
HEMET LAKE HYDRO SUBAREA					Y0282													
03E-09C01S /16/68 --	33	4790	-- 8.2	210	19 0.95 42	6 0.49 22	18 0.78 34	2 0.05 2	6 0.20 9	85 1.39 61	8 0.17 7	18 0.51 22	0.0	0.3	--	--	161 120	72 0
03E-09R01S /16/68 --	33	4790	-- 8.3	320	38 1.90 56	4 0.33 10	25 1.09 32	2 0.05 1	12 0.40 12	134 2.20 64	13 0.27 8	18 0.51 15	4.0	0.3	--	--	204 183	111 0

TABLE E-1

MINERAL ANALYSES OF GROUND WATER

SOUTHERN CALIFORNIA

STATE DATE	WELL NO. TIME	COUNTY	LAB SAMPLER	TEMP PH	EC	MINERAL CONSTITUENTS IN				MILLIGRAMS PER LITER MILLIEQUIVALENTS PER LITER PERCENT REACTANCE VALUES				MILLIGRAMS PER LITER				TDS 180C (*105C) SUM
						CA	MG	NA	K	CO3	HCO3	SO4	CL	N03	F	B	SI02	
						SAN JUAN HYDRO UNIT				Z0100								
LAGUNA HYDRO SUBUNIT						Z01A0												
LAGUNA HYDRO SUBAREA						Z01A2												
07S/08W-32L02S	03/20/68	30	5102	--	4240	202	126	667	6	0	421	1157	628	0.0	0.9	1.10	14	3090
				7.7		10.08	10.36	29.01	0.15	0.00	6.90	24.09	17.71	0.00				3009
						20	21	58	0	0	14	49	36	0				
ALISO HYDRO SUBAREA						Z01A3												
06S/07W-07R01S	09/26/68	30	3102	--	1820	196	46	132	5	0	298	545	88	0.0	0.8	0.22	30	1380
				7.4		9.78	3.78	5.74	0.13	0.00	4.88	11.35	2.48	0.00				1190
						50	19	29	1	0	26	61	13	0				
06S/08W-23Q02S	03/21/68	30	5102	--	351	28	7	12	6	0	188	2	9	0.3	0.1	0.20	7	218
				7.5		1.40	0.57	0.52	0.15	0.00	3.08	0.04	0.25	0.00				164*
						53	22	20	6	0	91	1	7	0				
06S/08W-23R01S	03/01/68	30	5102	60	1880	165	57	172	5	0	305	589	138	0.6	0.5	0.14	19	1370
				7.7		8.23	4.69	7.48	0.13	0.00	5.00	12.26	3.89	0.01				1297
						40	23	36	1	0	24	58	18	0				
06S/08W-26C01S	10/18/67	30	5102	66	2830	268	98	262	6	0	350	925	250	64.0	0.2	0.25	27	2210
	1100			7.4		13.37	8.06	11.40	0.15	0.00	5.74	19.26	7.05	1.03				2073
						40	24	34	0	0	17	58	21	3				
	04/24/68	30	5102	--	2870	268	97	--	--	0	396	--	259	50.0	--	--	--	--
	1035			7.2		13.37	7.98	--	--	0.00	6.49	--	7.30	0.81				--
	09/26/68	30	3102	--	2750	252	87	--	--	0	392	--	232	42.0	--	--	--	--
	--			7.3		12.57	7.15	--	--	0.00	6.42	--	6.54	0.68				--
07S/08W-16Q02S	10/17/67	30	3102	--	2030	5	1	--	--	5	609	--	288	0.1	--	--	--	--
	1145			8.4		0.25	0.08	--	--	0.17	9.98	--	8.12	0.00				--
	03/21/68	30	5102	70	2030	4	2	435	7	21	593	85	294	0.2	1.0	4.00	27	1210
	--			8.4		0.20	0.16	18.92	0.18	0.70	9.72	1.77	8.29	0.00				1172*
						1	1	97	1	3	47	9	40	0				
07S/08W-32L02S	11/09/67	30	3102	--	3770	--	--	--	--	0	369	--	526	--	--	--	--	--
	1500			7.5						0.00	6.05	--	14.83	--				--
SAN JUAN HYDRO SUBUNIT						Z01B0												
06S/07W-07P01S	03/26/68	30	5102	60	--	163	30	87	6	0	258	419	72	4.0	0.6	0.19	23	1000
	1230			7.7		8.13	2.47	3.78	0.15	0.00	4.23	8.72	2.03	0.06				932
						56	17	26	1	0	28	58	13	0				
06S/07W-11J01S	10/12/67	30	3102	--	590	75	16	--	--	0	181	--	11	0.8	--	--	--	--
	1315			7.5		3.74	1.31	--	--	0.00	2.97	--	0.31	0.01				--
06S/07W-11N01S	03/26/68	30	5102	64	656	90	19	22	2	0	216	144	14	0.8	0.1	0.03	23	441
	1100			7.4		4.49	1.56	0.96	0.05	0.00	3.54	3.00	0.39	0.01				422
						64	22	13	1	0	51	43	6	0				
06S/07W-12B02S	03/26/68	30	5102	60	607	78	20	20	2	0	182	147	13	0.0	0.2	0.07	17	419
	1045			7.8		3.89	1.64	0.87	0.05	0.00	2.98	3.06	0.37	0.00				387
						60	25	13	1	0	46	48	6	0				
06S/07W-15F03S	03/26/68	30	5102	66	678	93	18	25	2	0	232	140	16	4.8	0.3	0.05	23	459
	1115			7.4		4.64	1.48	1.09	0.05	0.00	3.80	2.91	0.45	0.08				437
						64	20	15	1	0	52	40	6	1				
07S/07W-32R01S	10/17/67	30	3102	66	1590	82	23	--	--	0	267	--	197	6.0	--	--	--	--
	1350			7.6		4.09	1.89	--	--	0.00	4.38	--	5.55	0.10				--
	03/25/68	30	5102	64	1670	93	24	230	3	0	295	262	235	5.0	0.7	0.40	27	1060
	1340			7.7		4.64	1.97	10.00	0.08	0.00	4.83	5.45	6.63	0.08				1026
						28	12	60	0	0	28	32	39	0				
07S/07W-35P01S	10/17/67	30	3102	66	667	66	15	--	--	0	191	--	42	6.0	--	--	--	--
	1400			7.5		3.29	1.23	--	--	0.00	3.13	--	1.18	0.10				--
	03/25/68	30	5102	70	646	64	15	--	--	0	197	--	42	4.0	--	--	--	--
	1330			7.4		3.19	1.23	--	--	0.00	3.23	--	1.18	0.06				--
07S/07W-36A01S	10/17/67	30	3102	65	504	47	13	37	1	0	163	63	30	3.0	0.5	0.10	36	344
	1410			7.6		2.34	1.07	1.61	0.02	0.00	2.67	1.31	0.85	0.05				311
						46	21	32	0	0	55	27	17	1				
	03/27/68	30	5102	65	557	54	13	38	1	0	182	76	33	1.5	0.5	0.10	30	354
	1430			7.6		2.69	1.07	1.65	0.02	0.00	2.98	1.58	0.93	0.02				337
						49	20	30	0	0	54	29	17	0				
07S/08W-25P02S	10/18/67	30	3102	72	727	88	17	--	--	0	217	--	26	4.0	--	--	--	--
	1800			7.6		4.39	1.40	--	--	0.00	3.56	--	0.73	0.06				--
07S/08W-36C03S	10/25/67	30	3102	70	737	92	19	33	3	0	229	140	28	6.0	0.4	0.06	24	497
	1200			7.4		4.59	1.56	1.43	0.08	0.00	3.75	2.91	0.79	0.10				459
						60	20	19	1	0	50	39	10	1				
	03/25/68	30	5102	62	727	90	18	--	--	0	247	--	27	0.7	--	--	--	--
	1120			7.5		4.49	1.48	--	--	0.00	4.05	--	0.76	0.01				--

TABLE E-1
MINERAL ANALYSES OF GROUND WATER
SOUTHERN CALIFORNIA

WELL NO. DATE	COUNTY	LAB SAMPLER	TEMP PH	EC	MINERAL CONSTITUENTS IN				MILLIGRAMS PER LITER MILLIEQUIVALENTS PER LITER PERCENT REACTANCE VALUES				MILLIGRAMS PER LITER				TDS 180C (*105C) SUM	TH NCH
					CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SI02		
SAN JUAN HYDRO SUBUNIT					Z0180				Z0100									
05/08W-36P015	30	5102	66	862	78	21	71	3	0	208	192	52	0.0	0.3	0.11	3	545	281
3/25/68 1150	--	--	7.7		3.89	1.73	3.09	0.08	0.00	3.41	4.00	1.47	0.00				523	111
					44	20	35	1	0	38	45	16	0					
05/07W-058015	30	3102	72	1230	102	32	110	3	0	264	271	93	0.2	0.6	0.25	26	837	386
3/18/67 1440	--	--	7.6		5.09	2.63	4.78	0.08	0.00	4.33	5.64	2.62	0.00				768	170
					40	21	38	1	0	34	45	21	0					
3/25/68 1400	30	5102	64	1260	107	27	--	--	0	264	--	102	0.0	--	--	--	--	378
	--	--	7.6		5.34	2.22			0.00	4.33		2.88	0.00				--	162
05/08W-01L015	30	5102	68	1360	151	32	90	3	0	268	343	97	15.0	0.1	0.08	25	953	509
3/25/68 1520	--	--	7.5		7.53	2.63	3.91	0.08	0.00	4.39	7.14	2.73	0.24				888	289
					53	19	28	0	0	30	49	19	2					
05/08W-12L045	30	5102	66	1620	208	43	--	--	0	341	--	139	0.4	--	--	--	--	696
3/25/68 1545	--	--	8.0		10.38	3.54			0.00	5.59		3.92	0.01				--	417
05/08W-13C025	30	5102	--	2680	320	79	204	6	0	425	853	247	0.2	0.3	0.33	26	2070	1124
3/25/68 1430	--	--	7.3		15.97	6.50	8.87	0.15	0.00	6.96	17.76	6.96	0.00				1945	776
					51	21	28	0	0	22	56	22	0					
05/08W-14H025	30	5102	70	1960	236	62	--	--	0	383	--	201	10.0	--	--	--	--	844
3/25/68 1500	--	--	7.3		11.78	5.10			0.00	6.28		5.67	0.16				--	530
05/08W-23A045	30	5102	64	2420	308	53	--	--	0	375	--	260	1.4	--	--	--	--	987
3/25/68 1440	--	--	7.4		15.37	4.36			0.00	6.15		7.33	0.02				--	680
SAN MATEO HYDRO SUBUNIT					Z0100													
05/08W-258045	30	5102	76	737	96	19	32	2	0	275	129	24	0.3	0.3	0.05	25	477	318
3/25/68 1100	--	--	7.3		4.79	1.56	1.39	0.05	0.00	4.51	2.68	0.68	0.00				463	92
					61	20	18	1	0	57	34	9	0					
SANTA MARGARITA HYDRO UNIT					Z0200													
VALLECITOS HYDRO SUBAREA					Z0283													
05/02W-03R025	33	5050	--	958	83	19	81	5	0	184	156	98	5.3	0.3	0.00	--	588	285
5/27/68 1030	--	--	8.2		4.14	1.56	3.52	0.13	0.00	3.01	3.25	2.76	0.08				539	134
					44	17	38	1	0	33	36	30	1					
05/02W-28G035	33	5050	--	1110	96	16	102	4	0	142	219	120	12.0	0.5	0.00	--	708	306
5/27/68 1100	--	--	8.0		4.79	1.31	4.44	0.10	0.00	2.33	4.56	3.38	0.19				640	189
					45	12	42	1	0	22	44	32	2					
MURRIETA HYDRO SUBAREA					Z02C2													
05/03W-16C015	33	5050	--	641	41	27	46	2	--	209	8	89	32.0	0.4	0.00	--	507	213
3/30/68 --	--	--	7.9		2.04	2.22	2	0.05	--	3.42	0.17	2.51	0.52				349	42
					32	35	32	1		52	2	38	8					
05/03W-20A145	33	5050	--	789	33	43	69	2	--	260	36	94	20.0	0.3	0.00	--	525	259
3/30/68 --	--	--	8.1		1.65	3.54	3.00	0.05	--	4.26	0.75	2.65	0.32				426	46
					20	43	36	1		53	9	33	4					
05/03W-20H035	33	5050	--	641	30	11	90	2	--	180	33	90	2.0	0.4	0.04	--	391	120
3/30/68 --	--	--	8.3		1.50	0.90	3.91	0.05	--	2.95	0.69	2.54	0.03				347	--
					23	14	61	1		47	11	41	0					
05/03W-21D025	36	5050	--	683	30	35	55	1	--	230	21	83	20.0	0.3	0.00	--	458	219
3/30/68 --	--	--	7.9		1.50	2.88	2.39	0.02	--	3.77	0.44	2.34	0.32				359	30
					22	42	35	0		55	6	34	5					
05/03W-12N055	36	5050	--	1009	22	45	131	1	--	216	93	167	2.0	0.4	0.09	--	615	240
3/30/68 --	--	--	8.1		1.10	3.70	5.70	0.02	--	3.54	1.94	4.71	0.03				568	63
					10	35	54	0		35	19	46	0					
FRENCH HYDRO SUBAREA					Z02C3													
05/03W-23D015	33	5050	156	1278	8	0	248	8	21	2	20	344	0.0	5.2	4.00	--	694	20
3/12/68 1045	--	--	9.0		0.40	0.00	10.79	0.20	0.70	0.03	0.42	9.70	0.00				660	0
					3	0	95	2	6	0	4	89	0					
LOWER DOMENIGONI HYDRO SUBAREA					Z02C4													
05/01W-12H015	33	5050	--	1250	100	36	101	7	0	264	211	126	0.0	0.6	0.10	--	810	398
5/27/68 1400	--	--	8.0		4.99	2.96	4.39	0.18	0.00	4.33	4.39	3.55	0.00				712	181
					40	24	35	1	0	35	36	29	0					
PECHANGA HYDRO SUBAREA					Z02E2													
05/02W-208045	33	5050	--	1270	77	29	145	6	0	220	226	139	5.0	0.4	0.20	--	768	312
3/01/68 --	--	--	8.3		3.84	2.38	6.31	0.15	0.00	3.60	4.70	3.92	0.08				736	131
					30	19	50	1	0	29	38	32	1					
05/02W-28M015	33	5050	--	466	12	1	76	1	1	89	15	70	0.0	5.1	0.80	--	237	34
3/01/68 --	--	--	8.4		0.60	0.08	3.30	0.02	0.03	1.46	0.31	1.97	0.00				226*	0
					15	2	82	1	1	39	8	52	0					

TABLE E-1

MINERAL ANALYSES OF GROUND WATER

SOUTHERN CALIFORNIA

STATE WELL NO. DATE	COUNTY	LAB TIME	TEMP SAMPLER PH	EC	MINERAL CONSTITUENTS IN								MILLIGRAMS PER LITER				TDS 180C (*105C) SUM	N				
					SANTA MARGARITA HYDRO UNIT				Z0200				MILLIEQUIVALENTS PER LITER						PERCENT REACTANCE VALUES			
					CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SI02						
WILSON HYDRO SURUNIT LANCASTER VALLEY HYDRO SUBAREA					Z02F0 Z02F1																	
08S/01E-07004S 05/01/68 --	33	5050	70 8.6	1600	79 3.94 25	25 2.05 13	224 9.74 61	7 0.18 1	10 0.33 2	288 4.72 30	246 5.12 33	194 5.47 35	0.0 0.00 0	1.0	0.40	--	958 928	3				
08S/01E-17A02S 05/01/68 --	33	5050	-- 8.5	873	28 1.40 18	8 0.66 8	131 5.70 72	5 0.13 2	4 0.13 2	134 2.20 28	97 2.02 26	118 3.33 43	2.0 0.03 0	1.0	0.40	--	460 461	1				
ANZA HYDRO SUBUNIT UPPER COAHUILA HYDRO SUBAREA					Z02G0 Z02G2																	
07S/02E-13D01S 05/01/68 --	33	5050	-- 7.8	581	56 2.79 50	13 1.07 19	36 1.56 28	5 0.13 2	0 0.00 0	136 2.23 42	44 0.92 17	34 0.96 18	73.0 1.18 22	0.2	0.00	--	386 329*	1				
AGUANGA HYDRO SUBUNIT REDEC HYDRO SUBAREA					Z02H0 Z02H3																	
08S/01E-19Q02S 05/01/68 --	33	5050	66 8.5	1410	121 6.04 41	25 2.05 14	152 6.61 45	4 0.10 1	8 0.27 2	308 5.05 35	272 5.66 39	121 3.41 24	2.0 0.03 0	0.5	0.30	--	874 858	4				
SAN DIEGUITO HYDRO SUBUNIT SAN DIEGUITO HYDRO SUBAREA					Z05A0 Z05A1																	
13S/03W-28N02S 04/10/68 --	90	5050	68 7.4	2057	133 6.64 32	69 5.67 27	192 8.35 40	6 0.15 1	--	333 5.46 26	239 4.97 24	366 10.32 50	1.5 0.02 0	0.5	0.08	--	1274 1171	6				
13S/03W-32J02S 04/09/68 --	90	5050	68 8.0	2248	112 5.59 24	68 5.59 24	266 11.57 50	8 0.20 1	--	444 7.28 32	229 4.77 21	384 10.83 47	4.2 0.07 0	0.6	0.10	--	1334 1291	5				
13S/03W-33C06S 04/09/68 --	90	5050	69 6.9	2943	237 11.83 38	117 9.62 31	217 9.44 30	8 0.20 1	--	156 2.56 8	653 13.59 44	513 14.47 47	1.7 0.03 0	0.6	0.04	--	2052 1824	107				
13S/03W-33E01S 04/09/68 --	90	5050	66 7.1	3262	223 11.13 33	114 9.37 28	300 13.05 39	9 0.23 1	--	306 5.01 15	532 11.08 33	622 17.54 52	1.3 0.02 0	0.6	0.14	--	2095 1954	102				
14S/03W-04P01S 04/09/68 --	90	5050	69 7.3	3986	336 16.77 40	116 9.54 23	354 15.40 37	2 0.05 0	--	320 5.24 13	567 11.80 28	843 23.77 57	42.0 0.68 2	0.7	0.22	--	2722 2419	131				
14S/03W-07L04S 04/09/68 --	90	5050	66 7.5	2796	274 13.67 46	66 5.43 18	236 10.26 35	6 0.15 0	--	290 4.75 16	532 11.08 37	488 13.76 46	2.0 0.03 0	0.7	0.12	--	1937 1748	95				
HODGES HYDRO SUBUNIT HODGES HYDRO SUBAREA					Z0580 Z0581																	
13S/01W-06N01S 04/11/68 --	90	5050	72 6.2	2612	247 12.32 41	124 10.20 34	177 7.70 25	6 0.15 0	--	122 2.00 7	996 20.74 69	261 7.36 24	1.0 0.02 0	0.4	0.06	--	2094 1873	112				
13S/02W-02N01S 04/10/68 --	90	5050	70 7.1	2152	156 7.78 35	80 6.58 29	186 8.09 36	2 0.05 0	--	369 6.05 27	321 6.68 30	323 9.11 40	43.5 0.70 3	0.6	0.04	--	1458 1294	71				
13S/02W-12C01S 04/12/68 --	90	5050	68 6.3	2688	259 12.92 41	128 10.53 33	180 7.83 25	6 0.15 0	--	76 1.24 4	1063 22.13 72	263 7.42 24	5.4 0.09 0	0.7	0.00	--	2148 1943	117				
13S/02W-12N01S 04/11/68 --	90	5050	74 7.0	1739	92 4.59 27	63 5.18 30	168 7.31 42	4 0.10 1	--	210 3.44 20	254 5.29 30	285 8.04 46	36.0 0.58 3	0.5	0.02	--	1091 1006	48				
13S/02W-13C01S 04/12/68 --	90	5050	-- 7.0	1643	89 4.44 28	46 3.78 24	170 7.39 47	3 0.08 0	--	237 3.88 24	151 3.14 20	313 8.83 55	4.0 0.06 0	0.5	0.11	--	995 894	41				
GREEN HYDRO SUBAREA					Z0582																	
13S/02W-15R01S 04/11/68 --	90	5050	71 7.5	1081	45 2.24 20	28 2.30 21	146 6.35 58	2 0.05 0	--	366 6.00 56	29 0.60 6	144 4.06 38	4.0 0.06 1	1.1	0.11	--	590 580	22				
FELICITA HYDRO SUBAREA					Z0583																	
12S/02W-27N03S 04/10/68 --	90	5050	72 7.1	1038	62 3.09 27	42 3.45 30	109 4.74 42	3 0.08 1	--	149 2.44 21	163 3.39 30	148 4.17 37	82.5 1.33 12	0.5	0.04	--	746 684	32				
BEAR HYDRO SUBAREA					Z0584																	
12S/02W-26P01S 04/10/68 --	90	5050	68 7.1	1972	141 7.03 35	89 7.32 36	133 5.78 28	5 0.13 1	--	259 4.24 21	270 5.62 28	287 8.09 40	145.0 2.34 11	0.5	0.00	--	1300 1198	71				

TABLE E-1
MINERAL ANALYSES OF GROUND WATER

SOUTHERN CALIFORNIA

WELL NO. DATE	COUNTY	LAB SAMPLER	TEMP PH	EC	MINERAL CONSTITUENTS IN				MILLIGRAMS PER LITER MILLIEQUIVALENTS PER LITER PERCENT REACTANCE VALUES				MILLIGRAMS PER LITER				TDS 180C (*105C) SUM	TH NCH
					CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SiO2		
PASQUAL HYDRO SUBUNIT HIGHLAND HYDRO SUBAREA					SAN DIEGUITO HYDRO UNIT				Z0500									
Z05C0					Z05C1													
01W-05M01S	90	5050	69	998	29	31	112	2	--	123	67	159	70.5	0.7	0.03	--	564	200
12/68	--	--	6.9		1.45	2.55	4.87	0.05		2.01	1.39	4.48	1.14				532	86
					16	29	55	1		22	15	50	13					
SAN PASQUAL HYDRO SUBAREA					Z05C2													
01W-26N01S	90	5050	71	748	50	28	62	2	--	281	47	65	10.0	0.4	0.00	--	439	240
12/68	--	--	7.4		2.49	2.30	2.70	0.05		4.60	0.98	1.83	0.16				403	0
					33	30	36	1		61	13	24	2					
01W-30R01S	90	5050	74	1560	54	36	230	1	--	351	142	228	15.3	1.7	0.15	--	924	283
11/68	--	--	7.9		2.69	2.96	10.00	0.02		5.75	2.96	6.43	0.25				681	0
					17	19	64	0		37	19	42	2					
01W-31H01S	90	5050	73	1935	136	64	164	3	--	393	114	364	2.8	0.5	0.00	--	1136	603
11/68	--	--	7.5		6.79	5.26	7.13	0.08		6.44	2.37	10.26	0.04				1042	267
					35	27	37	0		34	12	54	0					
01W-32R01S	90	5050	70	958	48	25	103	2	--	198	37	152	40.5	0.6	0.04	--	563	223
11/68	--	--	7.2		2.39	2.05	4.48	0.05		3.24	0.77	4.29	0.65				506	47
					27	23	50	1		36	9	48	7					
01W-34P01S	90	5050	70	1004	73	40	75	2	--	303	104	108	3.3	0.5	0.04	--	607	347
12/68	--	--	7.4		3.64	3.29	3.26	0.05		4.97	2.16	3.04	0.05				555	85
					35	32	32	0		48	21	30	0					
01W-35R02S	90	5050	67	600	45	21	40	2	--	146	72	56	22.0	0.3	0.00	--	387	199
12/68	--	--	7.2		2.24	1.73	1.74	0.05		2.39	1.50	1.58	0.35				331	66
					39	30	30	1		41	26	27	6					
01W-36G01S	90	5050	68	624	47	22	45	2	--	177	71	60	6.5	0.3	0.00	--	389	208
12/68	--	--	7.9		2.34	1.81	1.96	0.05		2.90	1.48	1.69	0.10				341	49
					38	29	32	1		47	24	27	2					
01W-03F01S	90	5050	67	2081	132	89	177	2	--	493	168	317	67.5	0.6	0.06	--	1322	696
12/68	--	--	7.1		6.59	7.32	7.70	0.05		8.08	3.50	8.94	1.09				1196	278
					30	34	35	0		37	16	41	5					
MARIA VALLEY HYDRO SUBUNIT RAMONA HYDRO SUBAREA					Z05D0													
Z05D1																		
01E-11M01S	90	5050	66	1372	46	54	143	2	--	331	62	205	6.0	0.7	0.08	--	713	337
12/68	--	--	7.8		2.29	4.44	6.22	0.05		5.42	1.29	5.78	0.10				682	52
					18	34	48	0		43	10	46	1					
01E-15E03S	90	5050	67	625	33	16	66	3	--	118	33	76	61.0	0.3	0.03	--	378	148
12/68	--	--	7.2		1.65	1.31	2.87	0.08		1.93	0.69	2.14	0.98				347	38
					28	22	49	1		34	12	37	17					
01E-17L01S	90	5050	68	1374	58	42	146	4	--	120	39	346	28.0	0.7	0.00	--	860	318
12/68	--	--	7.4		2.89	3.45	6.35	0.10		1.97	0.81	9.76	0.45				723	206
					23	27	50	1		15	6	75	3					
01E-24R02S	90	5050	67	833	42	24	89	2	--	104	42	132	98.0	0.4	0.00	--	527	204
12/68	--	--	7.4		2.09	1.97	3.87	0.05		1.70	0.87	3.72	1.58				481	105
					26	25	48	1		22	11	47	20					
LOWER HATFIELD HYDRO SUBAREA					Z05D2													
02E-17C01S	90	5050	66	481	28	15	50	1	--	151	20	47	34.0	0.5	0.02	--	305	132
12/68	--	--	7.5		1.40	1.23	2.17	0.02		2.47	0.42	1.32	0.55				270	0
					29	25	45	0		52	9	28	11					
WASH HOLLOW HYDRO SUBAREA					Z05D3													
02E-09N01S	90	5050	64	1316	94	51	125	3	--	400	88	197	12.0	0.7	0.05	--	817	445
12/68	--	--	7.3		4.69	4.19	5.44	0.08		6.55	1.83	5.55	0.19				768	103
					33	29	38	0		46	13	39	1					
UPPER HATFIELD HYDRO SUBAREA					Z05D4													
02E-09M02S	90	5050	64	830	60	40	55	2	--	263	65	108	3.0	0.3	0.04	--	559	314
12/68	--	--	7.0		2.99	3.29	2.39	0.05		4.31	1.35	3.04	0.05				463	85
					34	38	27	1		49	15	35	0					
YSABEL HYDRO SUBUNIT BODEN HYDRO SUBAREA					Z05E0													
Z05E1																		
01E-04K01S	90	5050	67	588	33	23	51	2	--	187	24	67	19.0	0.2	0.02	--	366	177
12/68	--	--	7.5		1.65	1.89	2.22	0.05		3.06	0.50	1.89	0.31				312	10
					28	33	38	1		53	9	33	5					
SUTHERLAND HYDRO SUBAREA					Z05E3													
03E-31N01S	90	5050	66	552	39	22	36	2	--	107	63	63	39.0	0.4	0.01	--	333	188
12/68	--	--	7.4		1.95	1.81	1.56	0.05		1.75	1.31	1.78	0.63				317	87
					36	34	29	1		32	24	32	11					
SANTA YSABEL HYDRO SUBAREA					Z05E4													
03E-16C01S	90	5050	66	364	27	15	26	1	--	112	29	41	4.0	0.3	0.00	--	204	129
12/68	--	--	7.4		1.35	1.23	1.13	0.02		1.83	0.60	1.16	0.06				199	24
					36	33	30	1		50	16	32	2					

TABLE E-1

MINERAL ANALYSES OF GROUND WATER

SOUTHERN CALIFORNIA

STATE WELL NO. DATE	COUNTY	LAB SAMPLER	TEMP PH	EC	MINERAL CONSTITUENTS IN				MILLIGRAMS PER LITER MILLIEQUIVALENTS PER LITER PERCENT REACTANCE VALUES				MILLIGRAMS PER LITER				TDS 180C (*105C) SUM
					CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SI02	
					SAN DIEGUITO HYDRO UNIT				Z0500								
SANTA YSABEL HYDRO SUBUNIT SANTA YSABEL HYDRO SUBAREA					Z05E0 Z05E4												
12S/03E-28B01S 04/17/68	90	5050	64 6.9	428	28 1.40 32	19 1.56 36	30 1.30 30	3 0.08 2	-- 2.62 60	160 0.69 16	33 0.90 21	32 0.18 4	11.0 0.3 0.01	--	--	243 235	
					SAN DIEGO HYDRO UNIT				Z0700								
LOWER SAN DIEGO HYDRO SUBUNIT SANTEE HYDRO SUBAREA					Z07A0 Z07A2												
15S/01E-06N02S 06/20/68	90	5877 820	-- 7.3	1200	76 3.79 29	36 2.96 23	141 6.13 47	1 0.02 0	0 0.00 0	256 4.19 32	95 1.98 15	230 6.49 50	20.0 0.32 2	0.4	0.67	--	748 726
15S/01E-07L04S 06/20/68	90	5877 1400	71 7.8	950	52 2.59 24	29 2.38 22	129 5.61 53	2 0.05 0	0 0.00 0	268 4.39 40	62 1.29 12	190 5.36 48	0.0 0.00 0	0.5	0.33	--	700 597
15S/01E-07M02S 06/20/68	90	5877 1000	-- 7.8	950	88 4.39 21	63 5.18 25	252 10.96 53	3 0.08 0	0 0.00 0	415 6.80 31	126 2.62 12	450 12.69 57	0.3 0.00 0	0.4	0.00	--	1360 1187*
15S/01E-17R02S 05/22/68	90	5420	-- 7.4	791	69 3.44 41	26 2.14 26	62 2.70 32	3 0.08 1	0 0.00 0	195 3.20 38	159 3.31 39	68 1.92 23	0.3 0.00 0	--	--	--	606 484
15S/01E-18A01S 06/20/68	90	5877 1030	69 7.7	780	64 3.19 39	32 2.63 32	54 2.35 29	2 0.05 1	0 0.00 0	220 3.60 41	152 3.16 36	70 1.97 23	0.0 0.00 0	0.4	0.10	--	632 483*
15S/01E-18L01S 05/22/68	90	5877 955	67 7.2	505	60 2.99 42	22 1.81 26	50 2.17 31	3 0.08 1	0 0.00 0	208 3.41 49	87 1.81 26	60 1.69 24	0.3 0.00 0	0.3	0.17	--	465 385
15S/01E-18M01S 05/22/68	90	5877 830	69 7.2	865	68 3.39 29	39 3.21 27	116 5.04 43	4 0.10 1	0 0.00 0	302 4.95 42	128 2.66 22	150 4.23 36	0.1 0.00 0	0.2	0.17	--	765 654
14S/01W-36R01S 06/20/68	90	5877 900	70 7.5	670	28 1.40 21	17 1.40 21	90 3.91 58	2 0.05 1	0 0.00 0	183 3.00 41	40 0.83 11	120 3.38 47	0.3 0.00 0	1.2	0.00	--	444 389*
15S/01W-01J03S 05/21/68	90	5877 1445	66 7.0	661	44 2.19 26	29 2.38 28	88 3.83 45	2 0.05 1	0 0.00 0	195 3.20 40	35 0.73 9	140 3.95 49	6.2 0.10 1	0.5	0.17	--	412 441*
15S/01W-22G02S 06/20/68	90	5877 1300	73 7.3	2000	124 6.19 31	73 6.00 30	183 7.96 39	3 0.08 0	0 0.00 0	256 4.19 21	85 1.77 9	490 13.82 69	15.0 0.24 1	0.7	0.20	--	1504 1100
15S/01W-22O03S 05/22/68	90	5877 1235	69 6.2	1940	300 14.97 42	149 12.25 34	160 6.96 20	54 1.38 4	0 0.00 0	110 1.80 5	1190 24.77 70	300 8.46 24	12.0 0.19 0	0.7	0.17	--	2800 2220
15S/01W-23N01S 06/21/68	90	5877 1530	70 7.2	2200	184 9.18 35	97 7.98 30	207 9.00 34	12 0.31 1	0 0.00 0	122 2.00 7	820 17.07 64	260 7.33 28	3.7 0.06 0	0.4	0.00	--	1832 1645
15S/01W-23P01S 05/22/68	90	5877 1205	68 6.2	1370	144 7.18 34	80 6.58 31	160 6.96 33	7 0.18 1	0 0.00 0	122 2.00 9	671 13.97 64	210 5.92 27	0.1 0.00 0	0.4	1.00	--	1545 1334
15S/01W-24B04S 06/19/68	90	5877 1500	69 7.4	1750	108 5.39 27	68 5.59 28	198 8.61 44	4 0.10 0	0 0.00 0	293 4.80 24	280 5.83 29	340 9.59 47	2.1 0.03 0	0.6	0.67	--	1352 1146
15S/01W-24C04S 06/19/68	90	5877 730	67 7.8	1750	116 5.79 29	70 5.76 28	198 8.61 43	3 0.08 0	0 0.00 0	281 4.60 23	271 5.64 28	360 10.15 50	1.1 0.02 0	0.4	0.00	--	1280 1158
15S/01W-24C07S 06/19/68	90	5877 800	71 7.2	2600	264 13.17 42	106 8.72 28	219 9.53 30	6 0.15 0	0 0.00 0	232 3.80 11	1036 21.57 63	320 9.02 26	0.4 0.01 0	0.7	0.67	--	2368 2067*
15S/01W-27H01S 05/22/68	90	5877 1300	73 7.0	720	52 2.59 27	32 2.63 28	95 4.13 44	4 0.10 1	0 0.00 0	159 2.61 27	148 3.08 32	130 3.67 39	9.4 0.15 2	0.5	0.00	--	677 550
15S/01W-30K01S 06/20/68	90	5877 1630	71 7.8	850	40 1.99 23	32 2.63 30	93 4.04 46	5 0.13 1	0 0.00 0	171 2.80 29	67 1.39 14	190 5.36 56	3.3 0.05 0	0.4	0.50	--	664 516*
EL CAJON HYDRO SUBAREA					Z07A3												
15S/01W-28O01S 06/21/68	90	5877 1330	74 7.5	2900	172 8.58 30	63 5.18 18	345 15.01 52	3 0.08 0	0 0.00 0	390 6.39 21	234 4.87 16	670 18.89 63	2.5 0.04 0	0.6	0.90	--	1980 1683
EL MONTE HYDRO SUBAREA					Z07A5												
15S/01E-02K01S 05/21/68	90	5877 1000	76 7.1	440	52 2.59 40	29 2.38 36	35 1.52 23	2 0.05 1	0 0.00 0	232 3.80 64	15 0.31 5	60 1.69 29	5.3 0.08 1	0.1	0.33	--	376 313*

TABLE E-1
MINERAL ANALYSES OF GROUND WATER

SOUTHERN CALIFORNIA

WELL NO. DATE	COUNTY	LAB SAMPLER	TEMP PH	EC	MINERAL CONSTITUENTS IN				MILLIGRAMS PER LITER MILLIEQUIVALENTS PER LITER PERCENT REACTANCE VALUES				MILLIGRAMS PER LITER				TDS 180C (*105C) SUM	TH NCM
					CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SI02		
SAN DIEGO HYDRO UNIT					Z0700				Z0700									
LOWER SAN DIEGO HYDRO SUBUNIT EL MONTE HYDRO SUBAREA					Z07A5													
S/01E-02M015 6/18/68 1410	90	5877	73 7.9	700	52 2.59 33	22 1.81 23	76 3.30 42	3 0.08 1	0 0.00 0	281 4.60 57	53 1.10 14	80 2.26 28	4.9 0.08 1	0.4	0.67	--	528 431	220 0
S/01E-02N015 5/21/68 1110	90	5877	67 7.1	440	40 1.99 35	22 1.81 32	42 1.83 32	2 0.05 1	0 0.00 0	171 2.80 51	16 0.33 6	80 2.26 41	9.3 0.15 3	0.0	0.83	--	428 297	190 50
S/01E-02P015 5/22/68 1030	90	5877	66 6.9	505	52 2.59 37	27 2.22 31	50 2.17 31	3 0.08 1	0 0.00 0	158 2.59 36	82 1.71 24	100 2.82 39	7.1 0.11 2	0.1	0.17	--	508 400	241 111
S/01E-09J025 6/18/68 1130	90	5877	-- 7.2	1200	128 6.39 44	56 4.60 32	80 3.48 24	4 0.10 1	0 0.00 0	183 3.00 20	466 9.70 65	70 1.97 13	18.0 0.29 2	0.5	0.22	--	1140 913	550 400
S/01E-10H035 6/18/68 175	58	--	75 0.7	9001	60 2.99 34	32 2.63 30	69 3.00 35	2 0.05 1	0 0.00 0	256 4.19 47	117 2.43 27	80 2.26 25	1.4 0.02 0	0.4	0.40	--	620 489	281 71
S/01E-10K015 6/19/68 1330	90	5877	68 7.5	1350	120 5.99 39	61 5.02 32	100 4.35 28	4 0.10 1	0 0.00 0	427 7.00 44	150 3.12 20	200 5.64 35	7.1 0.11 1	0.3	0.67	--	1080 853	551 200
S/01E-10N025 6/19/68 1400	90	5877	70 7.5	600	52 2.59	19 1.56	--	--	0 0.00	244 4.00	43 0.89	70 1.97	0.0 0.00	0.3	0.00	--	476 --	208 8
S/01E-11D025 6/18/68 1430	90	5877	67 7.4	500	40 1.99 37	19 1.56 29	41 1.78 33	1 0.02 0	0 0.00 0	183 3.00 52	55 1.14 20	56 1.58 27	3.5 0.06 1	0.2	0.20	--	464 306#	178 28
S/01E-11E015 6/18/68 1600	90	5877	-- 7.7	900	72 3.59 41	39 3.21 36	46 2 23	2 0.05 1	0 0.00 0	293 4.80 54	62 1.29 14	96 2.71 30	4.9 0.08 1	0.4	0.20	--	732 467	340 100
YAMACA HYDRO SUBUNIT INAJA HYDRO SUBAREA					Z07D0				Z07D1									
S/04E-07R015 9/08/68 --	90	5050	68 7.4	378	30 1.50 42	9 0.74 21	30 1.30 36	2 0.05 1	0 0.00 0	139 2.28 62	16 0.33 9	36 1.01 28	1.2 0.02 0	0.2	0.00	--	234 193	112 0
MORRETT LAKE HYDRO SUBUNIT					Z11C0				Z1100									
S/04E-32H015 6/26/68 1030	90	5050	-- 6.8	1572	132 6.59 43	69 5.67 37	66 2.87 19	5 0.13 1	--	206 3.38 22	71 1.48 10	348 9.81 65	33.0 0.53 3	0.3	0.00	--	1149 826	614 445
S/04E-33NS15 6/26/68 1130	90	5050	-- 7.5	1818	139 6.94 35	78 6.41 33	137 5.96 30	10 0.25 1	--	553 9.06 47	82 1.71 9	298 8.40 44	5.3 0.08 0	0.7	0.00	--	1176 1022	668 214

TABLE E-2 TRACE ELEMENT ANALYSES OF GROUND WATER

The CONSTITUENTS are as follows:

AL - Aluminum	GA - Gallium
BE - Beryllium	GE - Germanium
BI - Bismuth	MN - Manganese
CD - Cadmium	MO - Molybdenum
CO - Cobalt	NI - Nickel
CR - Chromium	PB - Lead
CU - Copper	TI - Titanium
FE - Iron	V - Vanadium
	Z - Zinc

The LAB and SAMPLER codes are as follows:

5010 - United States Geological Survey
5050 - Department of Water Resources
5057 - University of California at Riverside

TABLE E-2
TRACE ELEMENT ANALYSES OF GROUND WATER
SOUTHERN CALIFORNIA

SITE WELL NUMBER DATE SAMPLED REMARKS	DATE ANALYZED					LAB	CONSTITUENTS IN MICROGRAMS PER LITER (* IN MG/L)													DEG F	MG/L
	AL	BE	BI	CD	CO		CR	CU	FE	GA	GE	MN	MO	NI	PB	TI	V	ZN	TEMP		
CENTRAL COASTAL DRAINAGE PROVINCE (T)																					
0.86 PISMO HYDROLOGIC SUBAREA																					
12E-12R03M																					
0/05/67	5050		4/12/68		5010																
CLEAR, PETROLEUM ODOR, AIR LIFTED SAMPLE, PPG 80 MIN AT ABOUT 4 GPM																					
<1.3	<0.6	<0.3	<1.4	<1.4	<1.4	<1.4	<1.4	<1.4	<5.7	<0.3	<1.4	0.8	0.5	<1.4	<0.6	<0.3	<5.7	64	--		
12E-24B01M																					
0/04/67	5050		4/12/68		5010																
CLEAR, NO ODOR																					
<1.4	<0.6	<0.3	<1.4	<1.4	<1.4	<1.4	100	<5.7	<0.3	>343	13	2.4	<1.4	<0.6	0.7	<5.7	63	--	--		
0/04/67	5050		10/ /67		5057																
CLEAR, NO ODOR																					
<0.2*	--	--	--	--	<.001*	0.002*	0.010*	--	--	1.0*	0.013*	0.001*	<.001*	--	0.001*	0.001*	63	--	--		
12E-24B02M																					
0/04/67	5050		4/12/68		5010																
CLEAR, NO ODOR																					
<1.4	<0.6	<0.3	<1.4	<1.4	<1.4	<1.4	229	<5.7	<0.3	<1.4	5.1	<0.3	<1.4	<0.6	0.7	<5.7	66	--	--		
0/04/67	5050		10/ /67		5057																
CLEAR, NO ODOR																					
<0.1*	--	--	--	--	<.001*	0.002*	0.003*	--	--	0.022*	0.003*	0.001*	<.001*	--	<.001*	0.005*	66	--	--		
12E-24B03M																					
0/04/67	5050		4/12/68		5010																
CLEAR, NO ODOR																					
<1.4	<0.6	<0.3	<1.4	<1.4	<1.4	<1.4	257	<5.7	<0.3	<1.4	24	<0.3	<1.4	<0.6	1.8	<5.7	69	--	--		
0/04/67	5050		10/ /67		5057																
CLEAR, NO ODOR																					
<0.1*	--	--	--	--	<.001*	0.002*	0.002*	--	--	<.001*	0.011*	<.001*	0.001*	--	0.001*	0.003*	69	--	--		

TABLE E-2
TRACE ELEMENT ANALYSES OF GROUND WATER
SOUTHERN CALIFORNIA

STATE WELL NUMBER DATE SAMPLED REMARKS	SAMPLER	DATE ANALYZED	LAB	CONSTITUENTS IN MICROGRAMS PER LITER (* IN MG/L)														DEG F TEMP			
				AL	BE	BI	CD	CO	CR	CU	FE	GA	GE	MN	MO	NI	PB		TI	V	ZN
LOS ANGELES DRAINAGE PROVINCE (U)																					
U-02.B0 UPPER VENTURA RIVER HYDROLOGIC SUBUNIT																					
4N/23W-16808S																					
10/11/67 CLEAR,NO ODOR	5050	2/23/68	5010	<3.3	<1.3	<0.7	<3.3	<3.3	<3.3	<3.3	120	<13	<0.7	17	<0.7	4.4	<3.3	<1.3	0.7	1530	--
9/26/68 CLEAR,NO COLOR,NO ODOR,NO FOAM,NO ALGAE	5050	3/14/69	5010	<3.3	<1.3	<0.7	<3.3	<3.3	<3.3	<3.3	12	<13	--	<3.3	<0.7	<0.7	<3.3	<1.3	<0.7	1870	TK
U-02.C2 OJAI HYDROLOGIC SUBAREA																					
4N/22W- 6J07S																					
9/26/68 CLEAR,NO COLOR,NO ODOR,NO FOAM,NO ALGAE,PPG ON ARRIVAL,OTHER NO. 5	5050	3/14/69	5010	31	<1.3	<0.7	<3.3	<3.3	<3.3	<3.3	5.9	<13	<0.7	11	<0.7	<0.7	<3.3	<1.3	<0.7	307	64
U-03.A1 OXNARD HYDROLOGIC SUBAREA																					
1N/21W-19J03S																					
10/11/67 CLEAR,SLIGHT SULFUR ODOR,PPG,PRESSURE SYSTEM	5050	2/23/68	5010	<3.3	<1.3	<0.7	<3.3	<3.3	<3.3	<3.3	193	<13	<0.7	>1080	61	7.3	<3.3	<1.3	<0.7	1200	--
1N/21W-19R05S																					
9/26/68 CLEAR,NO COLOR,HYDROGEN SULFIDE ODOR,NO FOAM,NO ALGAE,PPG,OTHER NO. MIDWAY 1	5050	3/14/69	5010	<3.3	<1.3	<0.7	<3.3	<3.3	<3.3	<3.3	9.3	<13	<0.7	3.7	16	<0.7	<3.3	<1.3	<0.7	<13	69
1N/21W-30A02S																					
9/26/68 CLEAR,NO COLOR,NO FOAM,NO ALGAE,HYDROGEN SULFIDE ODOR,PUMPED RECENTLY,PUMPED 3 MIN FOR SAMPLE	5050	12/11/68	5010	<3.3	<1.3	<0.7	<3.3	<3.3	<3.3	<3.3	3.7	<13	<0.7	200	8.0	<0.7	<3.3	<1.3	<0.7	<13	71
1N/22W- 2K04S																					
9/26/68 CLEAR,NO COLOR,NO ODOR,NO FOAM,NO ALGAE,PUMPS INTERMITTENTLY	5050	12/11/68	5010	80	<1.3	<0.7	<3.3	<3.3	<3.3	<3.3	20	<13	<0.7	<3.3	8.0	<0.7	<3.3	<1.3	1.2	<13	TK
2N/21W-18R05S																					
10/11/67 CLEAR,NO ODOR,PPG	5050	2/23/68	5010	23	<1.3	<0.7	<3.3	<3.3	<3.3	<3.3	160	<13	<0.7	9.3	43	5.1	<3.3	<1.3	0.9	<13	--
2N/21W-19C01S																					
9/26/68 CLEAR,NO COLOR,NO ODOR,NO FOAM,NO ALGAE,PUMPED RECENTLY,PUMPED 3 MIN FOR SAMPLE	5050	12/11/68	5010	49	<1.3	<0.7	<3.3	<3.3	<3.3	<3.3	6.0	<13	<0.7	9.3	1.4	<0.7	<3.3	<1.3	1.1	<13	70
2N/21W-19G02S																					
3/21/68	5050	6/03/68	5010	12	<1.3	<0.7	<3.3	<3.3	<3.3	21	113	<13	<0.7	15	15	<0.7	<3.3	<1.3	1.9	900	TK
2N/22W-12E01S																					
10/11/67 CLEAR,PRESSURE SYSTEM	5050	2/23/68	5010	<3.3	<1.3	<0.7	<3.3	<3.3	<3.3	<3.3	193	13	<0.7	8.0	<0.7	4.7	<3.3	<1.3	<0.7	<13	--
9/26/68 CLEAR,NO COLOR,NO ODOR,NO FOAM,NO ALGAE,PPG ON ARRIVAL	5050	3/14/69	5010	52	<1.3	<0.7	<3.3	<3.3	<3.3	<3.3	11	<13	<0.7	27	1.8	5.3	<3.3	<1.3	<0.7	<13	65

TABLE E-2
TRACE ELEMENT ANALYSES OF GROUND WATER
SOUTHERN CALIFORNIA

STATE WELL NUMBER		DATE SAMPLED		SAMPLER		DATE ANALYZED		LAB		CONSTITUENTS IN MICROGRAMS PER LITER (* IN MG/L)										DEG F		MG/L				
REMARKS		AL	BE	BI	CD	CO	CR	CU	FE	GA	GE	MN	MO	NI	PB	TI	V	ZN	TEMP	TDS						
LOS ANGELES DRAINAGE PROVINCE (U)																										
U-03.A1 OXNARD HYDROLOGIC SUBAREA																										
2N/22W-12N06S																										
3/20/68		5050		6/03/68		5010		13	>28	<13	<0.7	18	8.7	1.2	<3.3	<1.3	<0.7	<13	--	--						
2N/22W-14L05S																										
10/11/67		5050		2/23/68		5010		CLEAR,NO ODOR,NO COLOR,PPG																		
<3.3	<1.3	<0.7	<3.3	<3.3	<3.3	<3.3	<3.3	600	<13	<0.7	<3.3	<0.7	<0.7	<3.3	<1.3	<0.7	<13	--	1425							
2N/22W-15001S																										
10/11/67		5050		3/01/68		5010		CLEAR,NO ODOR,PPG,PRESSURE SYSTEM,USED EVERY DAY																		
<3.3	<1.3	<0.7	<3.3	<3.3	<3.3	<3.3	<3.3	567	<13	<0.7	43	<0.7	<0.7	<3.3	<1.3	2.1	<13	--	1505							
9/26/68		5050		3/14/69		5010		CLEAR,NO COLOR,NO ODOR,NO FOAM,NO ALGAE																		
37	<1.3	<0.7	<3.3	<3.3	<3.3	<3.3	<3.3	5.9	<13	<0.7	<3.3	2.9	<0.7	<3.3	<1.3	<0.7	<13	66	1417							
2N/22W-20M07S																										
3/27/68		5050		6/03/68		5010		8.7	<1.3	<0.7	<3.3	<3.3	<3.3	9.3	6.4	<13	<0.7	113	15	<0.7	<3.3	<1.3	1.3	<13	--	965
2N/22W-23D05S																										
10/11/67		5050		2/23/68		5010		CLEAR,NO ODOR,NO COLOR,PPG																		
<3.3	<1.3	<0.7	<3.3	<3.3	<3.3	<3.3	<3.3	100	<13	<0.7	<3.3	8.0	1.7	<3.3	<1.3	1.1	100	--	885							
2N/22W-24P01S																										
10/11/67		5050		2/23/68		5010		CLEAR,NO ODOR,NO COLOR																		
<3.3	<1.3	<0.7	<3.3	<3.3	<3.3	<3.3	<3.3	160	<13	<0.7	6.0	13	1.9	<3.3	<1.3	1.6	<13	--	1120							
2N/22W-25A04S																										
9/26/68		5050		12/11/68		5010		CLEAR,NO COLOR,NO ODOR,NO FOAM,NO ALGAE,PUMPS INTERMITTENTLY																		
8.0	<1.3	<0.7	<3.3	<3.3	<3.3	<3.3	<3.3	4.3	<13	<0.7	1.9	12	2.9	<3.3	<1.3	1.2	360	TK	1078							
U-03.A2 PLEASANT VALLEY HYDROLOGIC SUBAREA																										
1N/21W- 9F01S																										
9/25/68		5050		3/14/69		5010		CLEAR,NO COLOR,HYDROGEN SULFIDE ODOR,NO FOAM,NO ALGAE,PPG ON ARRIVAL																		
<3.3	<1.3	<0.7	<3.3	<3.3	<3.3	<3.3	<3.3	23	<13	<0.7	<3.3	3.6	<0.7	<3.3	<1.3	<0.7	<13	78	475							
1N/21W-23A02S																										
10/11/67		5050		2/23/68		5010		CLEAR,NO ODOR,PPG,PRESSURE SYSTEM																		
<3.3	<1.3	<0.7	<3.3	<3.3	<3.3	<3.3	<3.3	313	<13	<0.7	53	16	<0.7	<3.3	<1.3	35	<13	--	2940							
U-03.B1 SANTA PAULA HYDROLOGIC SUBAREA																										
3N/21W-16K01S																										
10/11/67		5050		3/01/68		5010		CLEAR,NO ODOR,PPG,STANDBY WELL																		
<3.3	<1.3	<0.7	29	<3.3	<3.3	<3.3	<3.3	733	<13	<0.7	267	<0.7	6.7	<3.3	<1.3	2.3	<13	67	1463							
9/26/68		5050		3/05/69		5010		CLEAR,NO COLOR,NO ODOR,NO FOAM,NO ALGAE,PPG ON ARRIVAL																		
30	<1.3	<0.7	<3.3	<3.3	<3.3	<3.3	<3.3	<3.3	<13	<0.7	15	8.0	<0.7	<3.3	<1.3	<0.7	<13	67	1482							

TABLE E-2
TRACE ELEMENT ANALYSES OF GROUND WATER
SOUTHERN CALIFORNIA

STATE WELL NUMBER	DATE SAMPLED	SAMPLER	DATE ANALYZED	LAB	CONSTITUENTS IN MICROGRAMS PER LITER (* IN MG/L)													DEG F	MG/L
REMARKS	AL	BE	BI	CO	CO	CR	CU	FE	GA	GE	MN	MO	NI	PB	TI	V	ZN	TEMP	TDS
LOS ANGELES DRAINAGE PROVINCE (U)																			
U-03.B1 SANTA PAULA HYDROLOGIC SUBAREA																			
3N/21W-21B01S																			
3/21/68	5050	6/03/68	5010																
25	<1.3	<0.7	<3.3	<3.3	<3.3	<3.3	<3.3	>313	<13	<0.7	360	13	<0.7	<3.3	<1.3	4.4	<13	--	1690
3N/21W-21E01S																			
3/21/68	5050	6/03/68	5010																
22	<1.3	<0.7	<3.3	<3.3	<3.3	31	>64	<13	<0.7	213	18	1.8	5.9	<1.3	1.6	<13	79	1746	
9/26/68	5050	12/11/68	5010																
CLEAR,NO COLOR,NO ODOR,NO FOAM,NO ALGAE,PUMPING ON ARRIVAL																			
39	<1.3	<0.7	<3.3	<3.3	<3.3	<3.3	27	<13	<0.7	140	17	<0.7	<3.3	<1.3	1.7	<13	67	1886	
3N/21W-21F01S																			
10/11/67	5050	3/01/68	5010																
CLEAR,NO ODOR,PPG,PRESSURE SYSTEM,RUSTY AT START																			
<3.3	<1.3	<0.7	<3.3	<3.3	<3.3	<3.3	333	<13	<0.7	26	12	<0.7	<3.3	<1.3	<0.7	<13	--	1587	
9/26/68	5050	3/05/69	5010																
SLIGHTLY TURBID,SLIGHTLY RUSTY COLORED,HYDROGEN SULFIDE ODOR,NO FOAM,NO ALGAE,PRESSURE TK																			
<3.3	<1.3	<0.7	<3.3	<3.3	<3.3	<3.3	4.8	<13	<0.7	29	12	<0.7	<3.3	<1.3	<0.7	<13	TK	1667	
U-03.C1 FILLMORE HYDROLOGIC SUBAREA																			
4N/19W-32G01S																			
9/27/68	5050	12/11/68	5010																
CLEAR,NO COLOR,NO FOAM,NO ALGAE,SLIGHT HYDROGEN SULFIDE ODOR,PPG ON ARRIVAL																			
17	<1.3	<0.7	<3.3	<3.3	<3.3	<3.3	6.7	<13	<0.7	5.0	9.3	<0.7	<3.3	<1.3	1.9	<13	60	869	
4N/20W-24R02S																			
10/11/67	5050	3/01/68	5010																
CLEAR,NO ODOR,NO COLOR,PPG																			
<3.3	<1.3	<0.7	<3.3	<3.3	<3.3	<3.3	107	<13	<0.7	<3.3	<0.7	<0.7	<3.3	<1.3	1.7	<13	--	95	
U-03.D1 PIRU HYDROLOGIC SUBAREA																			
4N/18W-30L01S																			
10/11/67	5050	3/01/68	5010																
CLEAR,NO ODOR,PPG,PRESSURE SYSTEM																			
56	<1.3	<0.7	<3.3	<3.3	<3.3	<3.3	110	<13	<0.7	13	<0.7	<0.7	<3.3	<1.3	1.6	<13	--	98	
4N/19W-25C02S																			
9/27/68	5050	12/11/68	5010																
CLEAR,NO COLOR,NO ODOR,NO FOAM,NO ALGAE,NOT PPG,SAMPLED WATER IN SYSTEM,APPEARS TO BE OPERATING WELL																			
<3.3	<1.3	<0.7	<3.3	<3.3	<3.3	<3.3	53	<13	<0.7	<3.3	13	<0.7	<3.3	<1.3	1.3	<13	TK	143	
U-03.E1 EASTERN HYDROLOGIC SUBAREA																			
4N/15W-21A01S																			
9/27/68	5050	12/11/68	5010																
CLEAR,NO COLOR,NO ODOR,NO FOAM,NO ALGAE,PUMPS INTERMITTENTLY																			
13	<1.3	<0.7	<3.3	<3.3	<3.3	<3.3	7.3	<13	<0.7	4.7	4.9	<0.7	<3.3	<1.3	2.8	280	TK	73	
4N/16W-21D01S																			
10/11/67	5050	3/01/68	5010																
PPG																			
<3.3	<1.3	<0.7	<3.3	<3.3	<3.3	<3.3	233	<13	<0.7	67	<0.7	<0.7	<3.3	<1.3	7.3	>6700	--	64	

TABLE E-2
TRACE ELEMENT ANALYSIS OF GROUND WATER
SOUTHERN CALIFORNIA

WELL NUMBER DATE SAMPLED REMARKS	SAMPLER	DATE ANALYZED	LAB	CONSTITUENTS IN MICROGRAMS PER LITER (* IN MG/L)													DEG F		MG/L TDS		
				AL	BE	BI	CD	CO	CR	CU	FE	GA	GE	MN	MO	NI	PB	TI		V	ZN
LOS ANGELES DRAINAGE PROVINCE (U)																					
-03.E1 EASTERN HYDROLOGIC SUBAREA																					
4N/16W-21D01S																					
9/27/68	5050	12/11/68	5010	CLEAR,NO COLOR,NO ODOR,NO FOAM,NO ALGAE																	
15	<1.3	<0.7	<3.3	<3.3	<3.3	<3.3	13	<13	<0.7	<3.3	2.9	<0.7	<3.3	<1.3	3.6	<13	67	629			
4N/16W-33L01S																					
3/20/68	5050	6/03/68	5010																		
12	<1.3	<0.7	<3.3	<3.3	<3.3	9.3	>100	<13	<0.7	5.6	13	<0.7	<3.3	<1.3	3.0	<13	79	1170			
4N/17W-22E01S																					
9/27/68	5050	12/11/68	5010	CLEAR,NO COLOR,NO ODOR,NO FOAM,NO ALGAE,PPG ON ARRIVAL,OWNER NO. B-5																	
9.3	<1.3	<0.7	<3.3	<3.3	<3.3	<3.3	4.8	<13	<0.7	<3.3	7.3	<0.7	<3.3	<1.3	1.5	<13	69	1165			
-03.E5 ACTON HYDROLOGIC SUBAREA																					
4N/12W- 2E02S																					
10/11/67	5050	3/01/68	5010	CLEAR,NO ODOR,NO COLOR,PPG,PRESSURE SYSTEM																	
<3.3	<1.3	<0.7	<3.3	<3.3	<3.3	<3.3	247	<13	<0.7	56	<0.7	<0.7	<3.3	<1.3	4.8	5000	--	282			
4N/13W-12C01S																					
9/27/68	5050	12/11/68	5010	CLEAR,NO COLOR,NO ODOR,NO FOAM,NO ALGAE,PUMPED 9/26/68,PUMPED 3 MIN FOR SAMPLE																	
17	<1.3	<0.7	<3.3	<3.3	<3.3	<3.3	7.3	<13	<0.7	1.5	<0.7	<0.7	<3.3	<1.3	4.3	<13	63	406			
-03.F1 WEST LAS POSAS HYDROLOGIC SUBAREA																					
2N/21W- 8L01S																					
10/11/67	5050	2/23/68	5010	CLEAR,NO ODOR,NO COLOR,PPG																	
<3.3	<1.3	<0.7	<3.3	<3.3	<3.3	<3.3	220	<13	<0.7	21	15	4.7	<3.3	<1.3	4.3	<13	68	960			
9/26/68	5050	12/11/68	5010	CLEAR,NO COLOR,NO ODOR,NO FOAM,NO ALGAE,PUMPS INTERMITTENTLY,PPG ON ARRIVAL																	
<3.3	<1.3	<0.7	<3.3	<3.3	<3.3	<3.3	8.7	<13	<0.7	1.7	20	<0.7	<3.3	<1.3	3.9	<13	77	975			
-03.F2 EAST LAS POSAS HYDROLOGIC SUBAREA																					
2N/20W- 9H01S																					
9/25/68	5050	3/14/69	5010	CLEAR,NO COLOR,NO ODOR,NO FOAM,NO ALGAE,PPG ON ARRIVAL																	
31	<1.3	<0.7	<3.3	<3.3	<3.3	<3.3	5.3	<13	<0.7	<3.3	<0.7	<0.7	<3.3	<1.3	<0.7	<13	74	336			
3N/20W-27G03S																					
10/11/67	5050	2/23/68	5010	CLEAR,NO ODOR,PPG																	
<3.3	<1.3	<0.7	<3.3	<3.3	<3.3	<3.3	100	<13	<0.7	27	12	3.6	11	<1.3	1.9	100	63	1170			
9/25/68	5050	12/11/68	5010	CLEAR,NO COLOR,NO ODOR,NO FOAM,NO ALGAE,PUMPS INTERMITTENTLY INTO LARGE TANK																	
6.0	<1.3	<0.7	7.3	<3.3	<3.3	<3.3	3.3	<13	<0.7	6.0	10	<0.7	<3.3	<1.3	1.4	67	1K	1201			

TABLE E-2
TRACE ELEMENT ANALYSES OF GROUND WATER
SOUTHERN CALIFORNIA

STATE WELL NUMBER	DATE SAMPLED	SAMPLER	DATE ANALYZED	LAB	CONSTITUENTS IN MICROGRAMS PER LITER (* IN MG/L)													UEG F	MG/
REMARKS	AL	BE	BI	CD	CO	CR	CU	FE	GA	GE	MN	MO	NI	PB	TI	V	ZN	TEMP	TDS
LOS ANGELES DRAINAGE PROVINCE (U)																			
U-03.F3 ARROYO SANTA ROSA HYDROLOGIC SUBAREA																			
2N/20W-23H02S																			
10/11/67	5050	2/23/68	5010	CLEAR,NO ODOR,PPG															
<3.3	<1.3	<0.7	<3.3	<3.3	<3.3	<3.3	233	<13	<0.7	133	<0.7	<0.7	<3.3	<1.3	120	<13	67	53	
2N/20W-23R02S																			
9/25/68	5050	12/11/68	5010	CLEAR,NO COLOR,NO ODOR,NO FOAM,NO ALGAE,PUMPED RECENTLY,PUMPED 5 MIN FOR SAMPLE															
27	<1.3	<0.7	<3.3	<3.3	<3.3	<3.3	10	<13	<0.7	5.3	8.0	<0.7	<3.3	<1.3	6.4	<13	70	96	
U-03.F4 CONEJO VALLEY HYDROLOGIC SUBAREA																			
1N/20W-15R03S																			
10/11/67	5050	2/23/68	5010	CLEAR,NO ODOR,PRESSURE SYSTEM															
<3.3	<1.3	<0.7	<3.3	<3.3	<3.3	<3.3	193	<13	<0.7	21	6.0	2.6	<3.3	<1.3	0.7	387	--	56	
2N/20W-36R01S																			
9/25/68	5050	3/14/69	5010	CLEAR,NO COLOR,HYDROGEN SULFIDE ODOR,NO FOAM,NO ALGAE,PPG ON ARRIVAL,PUMPS INTERMITTENTLY,VILLAGE 16															
<3.3	<1.3	<0.7	<3.3	<3.3	<3.3	<3.3	13	<13	<0.7	<3.3	2.7	<0.7	<3.3	<1.3	<0.7	<13	71	96	
U-03.F7 SIMI VALLEY HYDROLOGIC SUBAREA																			
2N/17W- 8J06S																			
9/25/68	5050	3/14/69	5010	CLEAR,NO COLOR,NO FOAM,NO ALGAE,HYDROGEN SULFIDE ODOR,TASTES LIKE IT SMELLS															
>0.3	<1.3	<0.7	<3.3	<3.3	<3.3	<3.3	3.3	<13	<0.7	<3.3	23	<0.7	<3.3	<1.3	10	<13	74	5	
2N/18W-10A02S																			
9/25/68	5050	3/14/69	5010	CLEAR,NO COLOR,NO ODOR,NO FOAM,NO ALGAE,STANDBY WELL,SAMPLED AFTER PPG 25 MIN															
100	<1.3	<0.7	<3.3	<3.3	<3.3	<3.3	7.3	<13	<0.7	<3.3	48	<0.7	<3.3	<1.3	6.3	<13	72	17	
U-05.A2 WEST COAST HYDROLOGIC SUBAREA																			
3S/13W-19K02S																			
9/30/68	5050	11/27/68	5010	CLEAR,NO COLOR,NO ODOR,NO FOAM,NO ALGAE,PUMPS INTERMITTENTLY															
10	<1.3	<0.7	<3.3	<3.3	<3.3	<3.3	19	<13	<0.7	15	<0.7	<0.7	<3.3	<1.3	<0.7	<13	69	4	
3S/13W-29D06S																			
9/30/68	5050	11/27/68	5010	CLEAR,HYDROGEN SULFIDE ODOR,NO FOAM,NO ALGAE															
7.3	<1.3	<0.7	<3.3	<3.3	<3.3	<3.3	18	<13	<0.7	<3.3	<0.7	2.0	<3.3	<1.3	<0.7	<13	72	-	
3S/14W- 7K05S																			
10/11/67	5050	2/23/68	5010	CLEAR,NO ODOR,NO COLOR,PPG															
<3.3	<1.3	<0.7	<3.3	<3.3	<3.3	<3.3	347	13	<0.7	37	<0.7	6.7	<3.3	<1.3	<0.7	<13	71	4	
9/30/68	5050	11/27/68	5010	CLEAR,NO COLOR,NO ODOR,NO FOAM,NO ALGAE,PPG,OTHER NO. 33															
60	<1.3	<0.7	<3.3	<3.3	<3.3	<3.3	57	<13	<0.7	15	<0.7	6.0	<3.3	<1.3	<0.7	<13	75	5	
3S/14W-35M06S																			
9/30/68	5050	11/27/68	5010	CLEAR,NO ODOR,NO COLOR,NO FOAM,NO ALGAE,NOT PPG-SAMPLED ENCLOSED RESERVOIR															
35	<1.3	<0.7	<3.3	<3.3	<3.3	5.3	60	<13	<0.7	13	<0.7	<0.7	<3.3	<1.3	<0.7	<13	TK	7	

TABLE E-2
TRACE ELEMENT ANALYSES OF GROUND WATER
SOUTHERN CALIFORNIA

DATE WELL NUMBER		DATE SAMPLED		SAMPLER		DATE ANALYZED		LAB		CONSTITUENTS IN MICROGRAMS PER LITER (* IN MG/L)										DEG F		MG/L
REMARKS		AL	BE	BI	CD	CO	CR	CU	FE	GA	GE	MN	MO	NI	PB	TI	V	ZN	TEMP	TDS		
LOS ANGELES DRAINAGE PROVINCE (U)																						
05.A2 WEST COAST HYDROLOGIC SUBAREA																						
S/13W-19J06S																						
9/30/68	5050	11/27/68	5010	NO COLOR, HYDROGEN SULFIDE ODOR, NO FOAM, NO ALGAE, CLEAR, PUMPS INTERMITTENTLY																		
17	<1.3	<0.7	<3.3	<3.3	<3.3	<3.3	<3.3	23	<13	<0.7	<3.3	<0.7	1.2	<3.3	<1.3	<0.7	<13	75	232			
S/14W-10002S																						
9/30/68	5050	11/27/68	5010	NO COLOR, HYDROGEN SULFIDE ODOR, NO FOAM, NO ALGAE, CLEAR, PPG ON ARRIVAL																		
15	<1.3	<0.7	<3.3	<3.3	<3.3	<3.3	<3.3	19	<13	<0.7	<3.3	<0.7	<0.7	<3.3	<1.3	<0.7	<13	73	289			
05.A3 SANTA MONICA HYDROLOGIC SUBAREA																						
S/14W-32M06S																						
9/30/68	5050	3/05/69	5010	CLEAR, NO COLOR, HYDROGEN SULFIDE ODOR, NO FOAM, NO ALGAE, PPG																		
6.7	<1.3	<0.7	<3.3	<3.3	<3.3	5.6	13	<13	<0.7	27	<0.7	<0.7	<3.3	<1.3	<0.7	<13	74	590				
S/15W-23J01S																						
10/11/67	5050	2/23/68	5010	CLEAR, NO ODOR, PPG 2 MIN, SUPPLY FOR BOMB SHELTER																		
25	<1.3	<0.7	<3.3	<3.3	<3.3	<3.3	>140	<13	<0.7	15	13	<0.7	<3.3	<1.3	<0.7	<13	--	255				
S/15W-32A05S																						
9/30/68	5050	3/05/69	5010	CLEAR, NO COLOR, NO ODOR, NO FOAM, NO ALGAE, PPG, OTHER NO. 4																		
57	<1.3	<0.7	<3.3	<3.3	<3.3	<3.3	73	<13	<0.7	4.7	<0.7	<0.7	<3.3	<1.3	<0.7	<13	69	628				
S/15W-33D01S																						
10/11/67	5050	2/23/68	5010	CLEAR, NO ODOR																		
<3.3	<1.3	<0.7	<3.3	<3.3	<3.3	<3.3	300	<13	<0.7	31	<0.7	6.7	<3.3	<1.3	2.3	<1.3	68	630				
S/15W-12B03S																						
9/31/68	5050	3/05/69	5010	CLEAR, NO COLOR, HYDROGEN SULFIDE ODOR, NO FOAM, NO ALGAE, PPG ON ARRIVAL																		
<3.3	<1.3	<0.7	<3.3	<3.3	<3.3	<3.3	6.3	<13	<0.7	<3.3	<0.7	<0.7	<3.3	<1.3	<0.7	<13	73	1286				
05.A5 CENTRAL HYDROLOGIC SUBAREA																						
S/13W-5B01S																						
9/30/68	5050	3/05/69	5010	CLEAR, NO COLOR, HYDROGEN SULFIDE ODOR, NO FOAM, NO ALGAE, PPG																		
9.3	<1.3	<0.7	<3.3	<3.3	<3.3	<3.3	4.3	<13	<0.7	<3.3	<0.7	<0.7	<3.3	<1.3	<0.7	<13	72	701				
S/13W-20R05S																						
10/11/67	5050	2/23/68	5010	NO ODOR, NO COLOR, SOME TURBIDITY AND SAND, PPG																		
<3.3	<1.3	<0.7	<3.3	<3.3	<3.3	28	>800	<13	<0.7	37	<0.7	<0.7	<3.3	<1.3	5.3	<13	60	540				
S/13W-25H03S																						
10/11/67	5050	3/01/68	5010	CLEAR, NO ODOR, PPG, PPG ANOTHER WELL NEARBY																		
47	<1.3	<0.7	<3.3	<3.3	<3.3	<3.3	>733	<13	<0.7	40	73	<0.7	<3.3	<1.3	1.9	<13	69	347				
S/13W-32R11S																						
3/20/68	5050	6/03/68	5010																			
19	<1.3	<0.7	<3.3	<3.3	<3.3	35	>193	<13	<0.7	79	8.0	<0.7	26	<1.3	<0.7	<13	70	336				

TABLE E-2
TRACE ELEMENT ANALYSES OF GROUND WATER
SOUTHERN CALIFORNIA

STATE WELL NUMBER		SAMPLER	DATE ANALYZED	LAB	CONSTITUENTS IN MICROGRAMS PER LITER (* IN MG/L)													DEG F	MG/L				
DATE SAMPLED	REMARKS				AL	BE	BI	CD	CO	CR	CU	FE	GA	GE	MN	MO	NI	PB	TI	V	ZN	TEMP	TDS
LOS ANGELES DRAINAGE PROVINCE (U)																							
U-05.A5 CENTRAL HYDROLOGIC SUBAREA																							
3S/11W-20J05S																							
10/11/67	5050	3/01/68	5010																				
CLEAR,NO ODOR,NO COLOR,PPG				<3.3	<1.3	<0.7	<3.3	<3.3	<3.3	<3.3	<3.3	4.7	<13	<0.7	10	<0.7	<0.7	<3.3	<1.3	<0.7	<13	68	29
3S/11W-20J06S																							
3/19/68	5050	6/03/68	5010																				
12	<1.3	<0.7	<3.3	<3.3	<3.3	<3.3	14	55	<13	<0.7	33	<0.7	1.3	<3.3	<1.3	<0.7	<13	--	--	--	--	24	
3S/11W-30P02S																							
10/11/67	5050	3/01/68	5010																				
CLEAR,NO ODOR,PPG,PPG EVERY DAY				<3.3	<1.3	<0.7	<3.3	<3.3	<3.3	<3.3	193	<13	<0.7	93	<0.7	<0.7	<3.3	<1.3	2.0	<13	69	31	
3S/12W- 1F07S																							
10/11/67	5050	2/23/68	5010																				
CLEAR,NO ODOR,NO COLOR,PPG,PRESSURE SYSTEM				17	<1.3	<0.7	<3.3	<3.3	<3.3	<3.3	120	<13	<0.7	<3.3	<0.7	<0.7	<3.3	<1.3	1.7	<13	--	--	37
3S/12W-35A04S																							
10/11/67	5050	2/23/68	5010																				
CLEAR,NO ODOR,NO COLOR,PPG,PRESSURE SYSTEM				<3.3	<1.3	<0.7	<3.3	<3.3	<3.3	30	133	<13	<0.7	220	<0.7	<0.7	<3.3	<1.3	1.3	<13	69	35	
4S/12W- 2A05S																							
10/11/67	5050	2/23/68	5010																				
CLEAR,NO ODOR,NO COLOR,PPG,PRESSURE SYSTEM				12	<1.3	<0.7	<3.3	<3.3	<3.3	<3.3	220	<13	<0.7	213	<0.7	<0.7	<3.3	<1.3	<0.7	233	--	--	25
U-05.B1 SAN FERNANDO HYDROLOGIC SUBAREA																							
1N/13W-18N01S																							
3/29/68	5050	6/03/68	5010																				
7.3	<1.3	<0.7	<3.3	<3.3	<3.3	<3.3	5.7	28	<13	<0.7	8.0	11	<0.7	<3.3	<1.3	6.4	<13	78	2				
1N/13W-20G01S																							
9/27/68	5050	3/05/69	5010																				
CLEAR,NO ODOR,NO COLOR,NOT PPG,PUMPS DAILY,SAMPLER SUSPECTS WATER MAY HAVE BEEN THRU SOFTENER				<3.3	<1.3	<0.7	<3.3	<3.3	<3.3	14	8.7	<13	<0.7	<3.3	6.7	<0.7	<3.3	<1.3	4.7	>6500	TK	3	
1N/14W- 6P02S																							
4/01/68	5050	6/03/68	5010																				
16	<1.3	<0.7	<3.3	<3.3	<3.3	<3.3	47	31	<13	<0.7	<3.3	3.3	0.9	8.7	<1.3	1.3	<13	--	--	--	--	2	
1N/14W- 6R07S																							
4/01/68	5050	6/03/68	5010																				
20	<1.3	<0.7	<3.3	<3.3	<3.3	<3.3	40	56	<13	<0.7	<3.3	4.9	1.1	35	<1.3	2.7	<13	--	--	--	--	2	
1N/14W- 9H04S																							
9/27/68	5050	12/11/68	5010																				
CLEAR,NO COLOR,NO ODOR,NO FOAM,NO ALGAE,PPG ON ARRIVAL				18	<1.3	<0.7	<3.3	<3.3	<3.3	<3.3	--	<13	<0.7	<3.3	11	<0.7	<3.3	<1.3	5.2	<13	68	3	
1N/15W- 2002S																							
4/01/68	5050	6/03/68	5010																				
16	<1.3	<0.7	<3.3	<3.3	<3.3	<3.3	14	33	<13	<0.7	24	77	0.9	3.9	<1.3	1.7	<13	--	--	--	--	8	

TABLE E-2
TRACE ELEMENT ANALYSES OF GROUND WATER
SOUTHERN CALIFORNIA

WELL NUMBER	DATE SAMPLED	SAMPLER	DATE ANALYZED	LAB	CONSTITUENTS IN MICROGRAMS PER LITER (* IN MG/L)													DEG F	MG/L
					AL	BE	BI	CD	CU	CR	CU	FE	GA	GE	MN	MO	NI		
LOS ANGELES DRAINAGE PROVINCE (U)																			
.B1 SAN FERNANDO HYDROLOGIC SUBAREA																			
17W-12A01S																			
/11/67	5050	2/23/68	5010	CLEAR, STRONG HYDROGEN SULFIDE ODOR, PPG, PRESSURE SYSTEM															
<3.3	<1.3	<0.7	<3.3	<3.3	<3.3	<3.3	313	<13	<0.7	273	<0.7	5.7	<3.3	<1.3	<0.7	300	--	510	
.B2 SYLMAR HYDROLOGIC SUBAREA																			
15W-33Q01S																			
/11/67	5050	2/23/68	5010	CLEAR, NO ODOR, PPG															
21	<1.3	<0.7	<3.3	<3.3	<3.3	<3.3	220	<13	<0.7	13	<0.7	3.9	<3.3	<1.3	3.9	<13	68	390	
/27/68	5050	12/11/68	5010	CLEAR, NO COLOR, NO ODOR, NO FOAM, NO ALGAE, PPG ON ARRIVAL															
10	<1.3	<0.7	<3.3	<3.3	<3.3	<3.3	8.7	<13	<0.7	<3.3	3.0	<0.7	<3.3	<0.7	5.2	<13	--	427	
.B3 TUJUNGA HYDROLOGIC SUBAREA																			
14W-29N02S																			
/11/67	5050	2/23/68	5010	CLEAR, NO ODOR, PPG, PRESSURE SYSTEM															
33	<1.3	<0.7	<3.3	<3.3	<3.3	<3.3	267	<13	<0.7	<3.3	<0.7	5.1	<3.3	<1.3	43	<13	--	295	
.C3 SANTA ANITA HYDROLOGIC SUBAREA																			
11W-21G05S																			
/11/67	5050	2/23/68	5010	CLEAR, NO ODOR, PPG															
<3.3	<1.3	<0.7	<3.3	<3.3	<3.3	<3.3	247	<13	<0.7	19	<0.7	5.5	<3.3	<1.3	13	<13	67	285	
.D1 MAIN SAN GABRIEL HYDROLOGIC SUBAREA																			
11W-11P07S																			
/11/67	5050	2/23/68	5010	CLEAR, NO ODOR, NO COLOR, PPG															
17	<1.3	<0.7	19	<3.3	<3.3	6.0	93	<13	<0.7	6.7	<0.7	5.7	<3.3	<1.3	1.5	93	68	325	
11W-12C02S																			
/19/68	5050	6/03/68	5010																
7.3	<1.3	<0.7	<3.3	<3.3	<3.3	6.1	16	<13	<0.7	<3.3	2.2	1.3	<3.3	<1.3	1.3	<13	--	221	
11W-33N07S																			
/11/67	5050	2/23/68	5010	CLEAR, NO ODOR, PPG															
<3.3	<1.3	<0.7	<3.3	<3.3	<3.3	13	313	<13	<0.7	17	<0.7	8.0	<3.3	<1.3	1.6	2000	--	635	
19W-18E03S																			
/11/67	5050	3/01/68	5010	CLEAR, NO ODOR, PPG, PRESSURE SYSTEM															
20	<1.3	<0.7	<3.3	<3.3	<3.3	28	73	<13	<0.7	5.3	11	2.9	<3.3	1.7	1.6	<13	--	992	
11W-6R03S																			
/11/67	5050	2/23/68	5010	CLEAR, NO ODOR, NO COLOR, PPG, PRESSURE SYSTEM															
<3.3	<1.3	<0.7	<3.3	<3.3	<3.3	8.0	267	<13	<0.7	8.7	<0.7	5.1	4.7	<1.3	2.3	1570	--	730	

The first part of the document discusses the importance of maintaining accurate records of all transactions and activities. It emphasizes that this is essential for ensuring transparency and accountability in the organization's operations.

Furthermore, it highlights the need for regular audits and reviews to identify any discrepancies or areas for improvement. This process should be conducted in a systematic and thorough manner to ensure the integrity of the data.

In addition, the document stresses the importance of training staff members on proper record-keeping procedures. This includes providing clear guidelines and instructions to ensure that all records are maintained consistently and accurately.

Overall, the document concludes that effective record-keeping is a critical component of any successful organization. It provides a solid foundation for decision-making and helps to ensure that the organization is always up-to-date and compliant with relevant regulations.

The following section details the specific steps and procedures for implementing a robust record-keeping system. This includes identifying the types of records to be maintained and the methods for their collection and storage.

It also outlines the roles and responsibilities of various staff members involved in the process. This ensures that everyone is clear on their duties and contributes to the overall effectiveness of the record-keeping system.

Finally, the document provides a summary of the key points discussed and offers recommendations for ongoing monitoring and evaluation. This helps to ensure that the record-keeping system remains relevant and effective over time.

The document is intended to serve as a comprehensive guide for all staff members involved in record-keeping. It is hoped that this information will be helpful and informative in your work.

Thank you for your attention and cooperation. We look forward to your feedback and suggestions for improving this document.

Yours faithfully,
[Signature]

[Name]
[Title]

[Address]
[City, State, Zip]

[Phone Number]
[Email Address]



Appendix F

WASTE WATER DATA

This appendix contains data on the quality and quantity of waste water discharged at various locations in Southern California and on the use of such waters, during the period from October 1, 1967, through September 30, 1968. Waste waters are a definite part of the State's total resources and, like streams and lakes, if carefully managed, can be put to beneficial use.

In all tabulations data are presented according to Water Quality Control Board regions. These regions are geographic areas defined in Section 13050 of the Water Code. For the Southern California area these are: Los Angeles Regional Water Quality Control Board (No. 4), Colorado River Basin Regional Water Quality Control Board (No. 7), Santa Ana Regional Water Quality Control Board (No. 8), San Diego Regional Water Quality Control Board (No. 9), and portions of Central Coastal Regional Water Quality Control Board (No. 3) and Lahontan Regional Water Quality Control Board (No. 6).

Records are not available from all dischargers of waste water in Southern California. Quantities discharged, reused, and disposed of are those reported to the Department by the dischargers who replied to a questionnaire.

The locations of the waste discharging facilities for which data are reported are shown on Figures F-1 through F-6.

The following terms are defined for use in this appendix:

"Waste" includes sewage and any and all other waste substances, liquid, solid, gaseous, or radioactive, associated with human habitation, or animal origin, or from any producing, manufacturing, or processing operation of whatever nature. (Section 13050 (d) of the Water Code.)

"Reclaimed Water" means water which, as a result of treatment of waste, is suitable for a direct beneficial use or a controlled use that would not otherwise occur. (Section 13050 (n) of the Water Code.)

"Reused Water" - Reclaimed water that has been reused for beneficial purposes.

"MGD" - Million gallons per day.

In Bulletin No. 130-67, no distinction was made between "Reclaimed Water" and "Reused Water"; therefore the quantities reported as reused or reclaimed in that bulletin are not comparable with the quantities reported as reused in this bulletin.

WASTE WATER DISCHARGERS
CENTRAL COASTAL REGION (No. 3)

1. South San Luis Obispo County Sanitation District
2. Atascadero County Sanitation District
3. Atascadero State Hospital
4. Avila Sanitary District
5. Buellton Community Services District

6. Cachuma Sanitation District
7. Camp San Luis Obispo
8. Carpinteria Sanitary District
9. Federal Correctional Institution, Lompoc
10. Goleta Sanitary District

11. Guadalupe
12. Laguna County Sanitation District
13. Lompoc
14. Montecito Sanitary District
15. Morro Bay - Cayucos Sanitary District

16. Paso Robles
17. Paso Robles School for Boys
18. Pismo Beach
19. San Luis Obispo
20. San Miguel Sanitary District

21. San Simeon Acres Community Services District
22. Santa Barbara
23. Santa Maria
24. Santa Maria Public Airport
25. Shell Beach Sanitary District

26. Solvang Municipal Improvement District
27. Summerland Sanitary District
28. Vandenberg Air Force Base
29. Vandenberg Disposal Company
30. Western Pacific Sanitation Company

LEGEND
[10] WASTE DISCHARGING AGENCY



KEY MAP



WASTE WATER DISCHARGERS - CENTRAL COASTAL REGION
(NO. 3)

WASTE WATER DISCHARGERS
LOS ANGELES REGION (No. 4)

- | | |
|---|---|
| 1. Camarillo Sanitary District | 30. Wayside Honor Rancho |
| 2. Camarillo State Hospital | 31. Burbank |
| 3. Thousand Oaks, City of | 32. Indian Hills Mobile Home Village |
| 4. Crescenta Valley County Water District | <u>Las Virgines Municipal Water District</u> |
| 5. Fillmore | 33. Mullwood |
| | 34. Tapia |
| <u>Los Angeles: City of</u> | 35. Los Angeles Valley Settling Basin |
| 6. Hyperion | 36. Los Angeles County - Acton |
| 7. Terminal Island | 37. Los Angeles County - Afferbaugh |
| <u>Los Angeles County Sanitation Districts:</u> | 38. Los Angeles County - Miller-Kilpatrick |
| 8. Azusa | 39. Los Angeles County - Munz |
| 9. Joint Disposal Plant | |
| 10. La Canada | 40. Los Angeles County - Sheriff No. 13 |
| | 41. Los Angeles County - Sheriff No. 18 |
| 11. Miller | 42. Los Angeles County - Wayside Honor Dairy |
| 12. Pomona | <u>Los Angeles County Sewer Maintenance Districts</u> |
| 13. Saugus | 43. Malibu Canyon |
| 14. Whittier Narrows | 44. Trancas |
| 15. Montalvo Municipal Improvement District | 45. Ventura County Waterworks District No. 6 |
| 17. Oak View Sanitary District | |
| 19. Oxnard | |
| 20. Port Hueneme Sanitation District | |
| 21. Sanitation, Inc. | |
| 22. Santa Paula | |
| 23. Saticoy Sanitary District | |
| 24. Simi Valley Sanitation Company | |
| 25. United States Naval Air Station, Point Mugu | |
| 26. United States Naval Construction Battalion Center, Port Hueneme | |
| <u>Ventura, City of</u> | |
| 27. Eastside Plant | |
| 28. Seaside Plant | |

WASTE WATER DISCHARGERS
LAHONTAN REGION (No. 6)

1. Apple Valley Inn
2. Barstow
3. Bishop
4. Crestline Sanitation District

6. Edwards Air Force Base
7. Fort Irwin
8. General William J. Fox Airfield, Lancaster
9. George Air Force Base
10. Lake Arrowhead Sanitation District

- Los Angeles, City of - Department of Water and Power
11. Independence
12. Lone Pine
- Los Angeles County Sanitation Districts:
13. Lancaster
14. Palmdale
15. Mojave Public Utility District

17. Ridgecrest Sanitation District
- United States Marine Corps Supply Centers:
18. Nebo Area
19. Yermo Area
20. United States Naval Ordnance Test Station, China Lake
21. Victorville Sanitary District

WASTE WATER DISCHARGERS
COLORADO RIVER BASIN REGION (No. 7)

1. Banning
2. Blythe
3. Borrego Springs Park
4. Brawley
5. Calexico

6. Calipatria
7. Coachella Sanitary District
8. Consumers Utilities of California, Inc.
9. Desert Crest Mobile Community
10. East Blythe County Water District

11. El Centro
12. Holtville
13. Imperial
14. Imperial Valley Bowl
15. Imperial Valley College

16. Imperial Valley Country Club
17. Kaiser Steel Corporation, Eagle Mountain
18. U. S. Marine Corps Base, Twentynine Palms
19. Mecca Sanitary District
20. Naval Air Facility, El Centro

21. Needles
22. Niland Sanitary District
23. Coachella Valley County Water District
24. Palm Springs
25. Pioneers Memorial Hospital

26. Thermal Sanitary District
27. U. S. Gypsum Company
28. Westmorland
29. Valley Sanitary District



WASTE WATER DISCHARGERS
SANTA ANA REGION (No. 8)

- | | |
|---|--|
| 1. Beaumont | 26. Perris |
| 2. Big Bear Lake Sanitation District | 27. Redlands |
| 3. California Institution for Men,
Chino | 28. Rialto |
| 4. California Institution for Women,
Chino | <u>Riverside</u> |
| <u>Chino</u> | 29. Plant No. 1 |
| 5. Plant No. 1 | 30. Plant No. 2 |
| 6. Plant No. 2 | 31. Rubidoux Community Services
District |
| 7. Colton | <u>San Bernardino</u> |
| 8. Corona | 32. Plant No. 1 |
| 9. Cucamonga County Water District | 33. Plant No. 2 |
| 10. Edgemont Community Services
District | 34. Norton Air Force Base |
| 11. Elsinore | 35. Seal Beach |
| 12. Fontana | 36. Sunset Beach Sanitary District |
| 13. Glen Helen Rehabilitation Center | 37. United States Marine Corps
Air Station, El Toro |
| 14. Sunland Vineyard Co. - Guasti | 38. United States Naval Weapons
Station, Seal Beach |
| 15. Hemet - San Jacinto | <u>Western Pacific Sanitation Company</u> |
| 16. Jurupa Community Services District | 39. Etiwanda |
| 17. Kaiser Steel Corporation | 40. Vina Vista |
| 18. La Sierra College | 41. Brea |
| 19. Los Alisos Water District | <u>Eastern Municipal Water District</u> |
| 20. March Air Force Base | 42. Sun City |
| 21. March Air Force Base West | |
| 22. Space Center, Inc. | |
| 23. Ontario | |
| <u>Orange County Sanitation District</u> | |
| 24. Plant No. 1 | |
| 25. Plant No. 2 | |
| 25A. Orange County Honor Farm | |

LEGEND

10 WASTE DISCHARGING AGENCY



KEY MAP

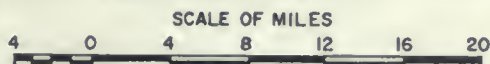


WASTE WATER DISCHARGERS - SANTA ANA REGION (NO. 8)

WASTE WATER DISCHARGERS
SAN DIEGO REGION (No. 9)

- Camp Pendleton, U.S.M.C.
- | | |
|--|--|
| 1. Plant No. 1 | 33. San Clemente |
| 2. Plant No. 2 | San Diego, City of - Utility |
| 3. Plant No. 3 | <u>Department</u> |
| 4. Plant No. 8 | 34. Brown Field |
| 5. Plant No. 9 | 35. Callan |
| | 36. Point Loma |
| 6. Plant No. 10 | 37. Rancho Bernardo |
| 7. Plant No. 11 | |
| 8. Plant No. 12 | 38. San Ysidro |
| 9. Plant No. 13 | 39. Sorrento |
| 10. Capistrano Beach Sanitary District | San Diego County - Department of |
| | <u>Special District Services</u> |
| 11. Encina | 40. Alpine |
| 12. Dana Point Sanitary District | 41. Campo |
| 13. Del Mar | 42. San Elijo |
| 14. Encinitas Sanitary District | |
| <u>Escondido:</u> | 43. Julian |
| 15. Plant No. 1 (old plant) | 44. Lakeside Water Reclamation Facility |
| | |
| 16. Plant No. 2 (new plant) | 45. Ramona |
| 17. Fallbrook Sanitary District | 46. Rancho Santa Fe |
| 18. Leucadia County Water District | 48. Viejas Honor Camp |
| 19. Lawrence Welk's Country Club Village | |
| 20. Laguna Beach Sanitary District | 50. San Juan Capistrano Sanitary District |
| | |
| 21. U. S. Naval Weapons Station, Fallbrook Annex | 51. San Marcos County Water District |
| <u>Oceanside:</u> | 52. San Pasqual Academy |
| 22. Buena Vista Plant | 53. Santee County Water District |
| 23. La Salinas Plant | 54. South Laguna Sanitary District |
| 24. San Luis Rey Plant | |
| 26. Orange County Sanitation District | 55. Valle Verde Community Services District |
| Moulton Niguel 1A - No. 12 | 56. U. S. Naval Auxiliary Air Station Ream Field |
| | |
| 27. Palomar Airport | |
| 28. Utah Construction Company | |
| 29. Pomerado County Water District | |
| <u>Rainbow Municipal Water District:</u> | |
| 30. Plant A | |
| 31. Plant B | |
| 32. Plant C | |

LEGEND
10 WASTE DISCHARGING AGENCY



WASTE WATER DISCHARGERS - SAN DIEGO REGION
(NO. 9)

TABLE F-1
SUMMARY
QUANTITY OF WASTE WATER DISCHARGED AND REUSED
SOUTHERN CALIFORNIA
WATER YEAR 1968

Water Quality Control Region	Volume in acre-feet						
	Reused	Place of disposal for waste water not reused				Total discharged	
		Land or watercourse	Saline water body				
Central Coastal Region 3	(8) 2,429	(15) 14,874	(10) 15,742	(28) 33,045			
Los Angeles Region 4	(13) 32,043	(20) 18,485	(8) 774,539	(36) 825,067			
Lahontan Region 6	(8) 2,756	(20) 13,139	(0) 0	(22) 15,895			
Colorado River Basin Region 7	(7) 3,785	(14) 7,002	(6) 4,763	(21) 15,550			
Santa Ana Region 8	(16) 7,888	(28) 58,448	(5) 134,482	(38) 200,818			
San Diego Region 9	(24) 10,764	(29) 8,881	(8) 99,204	(56) 118,849			
TOTALS	(76) 59,665	(126) 120,829	(37) 1,028,730	(201) 1,209,224			

Figures in parentheses indicate number of dischargers reporting in each category.
The figure in parentheses under "Total discharged" column indicates the total number of
dischargers reporting in the region.

TABLE F-2

QUANTITY OF WASTE WATER DISCHARGED AND REUSED

SOUTHERN CALIFORNIA
CENTRAL COASTAL REGION (REGION 3)

WATER YEAR 1967-68

DISCHARGER	AVERAGE DISCHARGE RATE IN MGD	VOLUME DISCHARGED IN ACRE-FEET	PORTION REUSED IN ACRE-FEET	TYPE OF REUSE	PLACE OF DISPOSAL FOR WASTE WATER NOT REUSED
BUELLTON COMMUNITY SERVICES DISTRICT	.066	74	0		LAND
CAMP SAN LUIS OBISPO (CALIF MENS COLONY)	.780	874	0		CHORRO CREEK
CARPINTERIA SANITARY DISTRICT	1.210	1355	0		PACIFIC OCEAN
GOLETA SANITARY DISTRICT	3.941	4415	0		PACIFIC OCEAN
GUADALUPE, CITY OF	.353	395	265	IRRIGATION	SANTA MARIA RIVER
LAGUNA COUNTY SANITATION DISTRICT	.940	1053	788	IRRIGATION	LAND
LOMPOC, CITY OF	2.152	2410	0		SANTA MARIA RIVER
MONTECITO SANITARY DISTRICT	.383	429	0		PACIFIC OCEAN
MORRO BAY-CAYUCOS SANITARY DISTRICTS	.887	994	0		PACIFIC OCEAN
PASO ROBLES, CITY OF	.854	957	0		SALINAS RIVER
PASO ROBLES SCHOOL FOR BOYS	.066	74	74	IRRIGATION	
PISMO BEACH, CITY OF PISMO BEACH PLANT	.204	229	0		PACIFIC OCEAN
SAN LUIS OBISPO, CITY OF	3.930	4402	220	IRRIGATION	SAN LUIS OBISPO CREEK
SAN LUIS OBISPO, COUNTY OF ATASCADERO COUNTY SANITATION DISTRICT	.062	69	0		PONDS
SAN SIMEON ACRES COMMUNITY SERVICES DISTRICT	.028	31	0		PACIFIC OCEAN
SANTA BARBARA, CITY OF	6.852	7675	0		PACIFIC OCEAN
SANTA MARIA AIRPORT	.215	241	241	IRRIGATION	
SANTA MARIA, CITY OF	3.689	4132	826	IRRIGATION	LAND
SAWYER CONVALESCENT HOSPITAL	.001	1	1	IRRIGATION	
SOLVANG MUNICIPAL IMPROVEMENT DISTRICT	.201	225	0		LAND
SOUTH SAN LUIS OBISPO COUNTY SANITATION DISTRICT	.474	531	0		PACIFIC OCEAN
SUMMERLAND SANITARY DISTRICT	.063	71	0		PACIFIC OCEAN
US AIR FORCE, CAMBRIA AIR FORCE STATION	.011	12	0		PACIFIC OCEAN

TABLE F-2

QUANTITY OF WASTE WATER DISCHARGED AND REUSED

SOUTHERN CALIFORNIA
CENTRAL COASTAL REGION (REGION 3)

WATER YEAR 1967-68

DISCHARGER	AVERAGE DISCHARGE RATE IN MGD	VOLUME DISCHARGED IN ACRE-FEET	PORTION REUSED IN ACRE-FEET	TYPE OF REUSE	PLACE OF DISPOSAL FOR WASTE WATER NOT REUSED
US AIR FORCE, CAMBRIA DEPENDENT HOUSING	.012	14	0		SANTA ROSA CREEK
US AIR FORCE, VANDENBERG AFB	1.467	1643	0		SANTA YNEZ RIVER
US BUR PRISONS, FED. CORRECTIONAL INSTIT., LOMPOC	.174	195	0		CREEK TRIB. TO SANTA YNEZ RIVER
VANDENBURG DISPOSAL COMPANY	.386	432	0		LAND
WESTERN PACIFIC SERVICES, LOMPOC	.100	112	14	IRRIGATION	SANTA YNEZ RIVER
TOTAL IN REGION 3	29.501	33045	2429		

TABLE F-2

QUANTITY OF WASTE WATER DISCHARGED AND REUSED

SOUTHERN CALIFORNIA
LOS ANGELES REGION (REGION 4)

WATER YEAR 1967-68

DISCHARGER	AVERAGE DISCHARGE RATE IN MGD	VOLUME DISCHARGED IN ACRE-FEET	PORTION REUSED IN ACRE-FEET	TYPE OF REUSE	PLACE OF DISPOSAL FOR WASTE WATER NOT REUSED
BURBANK, CITY OF	4.173	4674	963	INDUSTRIAL	BURBANK CHANNEL TO L. A. RIVER
CALIF STATE HOSPITAL-CAMARILLO	.292	327	0		LAND
CAMARILLO SANITARY DISTRICT	1.407	1576	1054	IRRIGATION	CALLEGUAS CREEK
CRESCENTA VALLEY COUNTY WATER DISTRICT	.052	58	0		LAND
FILLMORE, CITY OF	.395	443	0		SANTA CLARA RIVER
INDEPENDENT ORDER OF FORESTERS	.006	7	0		LAND
INDIAN HILLS MOBILE HOME VILLAGE	.013	15	0		LAND
LOS ANGELES, CITY OF					
HYPERION PLANT	325.814	364959	1780	IRRIGATION INDUSTRIAL	PACIFIC OCEAN
TERMINAL ISLAND PLANT	7.625	8541	0		PACIFIC OCEAN
VALLEY SETTLING BASIN	.530	594	5	IRRIGATION	RETURNED TO SEWER
LOS ANGELES, COUNTY OF					
ACTON REHABILITATION CENTER	.038	43	43	IRRIGATION	
LOS ANGELES COUNTY SANITATION DISTRICTS					
NO. 21 - POMONA	6.158	6898	6898	RECHARGE IRRIGATION	
NO. 22 - AZUSA	.692	775	775	RECHARGE	
NO. 26 - SAUGUS	1.761	1973	0		LAND
NO. 28 - LA CANADA	.119	133	133	IRRIGATION	
NO. 32 - VALENCIA	.129	145	0		LAND
JOINT WATER POLLUTION CONTROL PLANT	345.049	386505	0		PACIFIC OCEAN
WHITTIER NARROWS PLANT	16.315	18275	18275	RECHARGE	
LUCKY LAGER PLANT (AZUSA)	.347	389	389	RECHARGE	
MONTALVO MUNICIPAL IMPROVEMENT DISTRICT	.119	133	0		LAND
OAK VIEW SANITARY DISTRICT	1.004	1125	0		LAND
OXNARD, CITY OF	9.557	10705	0		PACIFIC OCEAN
PORT HUENEME SANITARY DISTRICT	2.151	2409	0		PACIFIC OCEAN
SANITATION, INC. (SIMI)	1.600	1792	0		LAND
SANTA CATALINA ISLAND COMPANY					
TWO HARBORS PLANT	.004	5	5	IRRIGATION	
SANTA PAULA, CITY OF	.913	1023	0		SANTA CLARA RIVER

TABLE F-2
QUANTITY OF WASTE WATER DISCHARGED AND REUSED

SOUTHERN CALIFORNIA
LOS ANGELES REGION (REGION 4)

WATER YEAR 1967-68

DISCHARGER	AVERAGE DISCHARGE RATE IN MGD	VOLUME DISCHARGED IN ACRE-FEET	PORTION REUSED IN ACRE-FEET	TYPE OF REUSE	PLACE OF DISPOSAL FOR WASTE WATER NOT REUSED
SATICOY SANITARY DISTRICT	.180	202	0		LAND
THOUSAND OAKS, CITY OF					
THOUSAND OAKS PLANT	3.736	4185	0		CONEJO CREEK
VENTURA COUNTY WATERWORKS DIST. 6 PLANT	.038	43	43	IRRIGATION	
US ARMY NIKE SITES					
MALIBU (LA 78-A)	.008	9	0		LAND
OAK MOUNTAIN (LA 88-L)	.012	13	0		LAND
SAND CANYON (LA 98)	.009	10	0		LAND
US NAVAL AIR STATION, POINT MUGU (IMHOFF PLANT)	.437	490	0		MUGU LAGOON
US NAVAL CONSTRUCTION BATT CTR, PORT HUENEME	.794	889	0		PACIFIC OCEAN
VENTURA, CITY OF					
EASTSIDE PLANT	3.467	3883	1680	IRRIGATION	LAND
SEASIDE PLANT	1.626	1821	0		PACIFIC OCEAN
TOTAL IN REGION 4	736.570	825067	32043		

TABLE F-2

QUANTITY OF WASTE WATER DISCHARGED AND REUSED

SOUTHERN CALIFORNIA
LAHONTAN REGION (REGION 6)

WATER YEAR 1967-68

DISCHARGER	AVERAGE DISCHARGE RATE IN MGD	VOLUME DISCHARGED IN ACRE-FEET	PORTION REUSED IN ACRE-FEET	TYPE OF REUSE	PLACE OF DISPOSAL FOR WASTE WATER NOT REUSED
APPLE VALLEY INN	.284	318	0		LAND
BARSTOW, CITY OF	1.000	1120	0		LAND
BISHOP, CITY OF	1.860	2083	0		LAND
CALIF DIV FORESTRY-PILOT ROCK CONSERVATION CAMP	.010	11	6	IRRIGATION	LAND
CRESTLINE SANITATION DISTRICT	.173	194	0		LAND
JUNE LAKE PUBLIC UTILITY DISTRICT	.050	56	0		LAND
LAKE ARROWHEAD SANITATION DISTRICT	.380	426	0		LAND
LOS ANGELES COUNTY-FOX AIRFIELD	.004	4	0		LAND
LOS ANGELES COUNTY SANITATION DISTRICTS					
NO. 14 - LANCASTER	3.225	3612	0		LAND
NO. 20 - PALMDALE	1.030	1154	398	IRRIGATION	LAND
LOS ANGELES DEPT. OF WATER AND POWER					
INDEPENDENCE SEWER	.062	70	0		LAND
LONE PINE SEWER	.252	282	0		LAND
MOJAVE PUBLIC UTILITY DISTRICT	.204	229	216	IRRIGATION	LAND
RIDGECREST SANITATION DISTRICT	.608	681	681	IRRIGATION	
US AIR FORCE, EDWARDS AFB	.953	1068	0		LAND
US AIR FORCE, GEORGE AFB	.792	887	300	IRRIGATION	LAND
US AIR FORCE PLANT NO. 42 (PALMDALE)	.164	184	0		LAND
US ARMY, FORT IRWIN	.485	543	543	IRRIGATION	
US MARINE CORPS SUPPLY CENTERS					
NEBO AREA	.330	370	10	IRRIGATION	LAND
YERMO AREA	.192	215	0		LAND
US NAVAL WEAPONS CENTER, CHINA LAKE	1.524	1707	602	IRRIGATION	LAND
VICTORVILLE SANITARY DISTRICT	.608	681	0		LAND
TOTAL IN REGION 6	14.190	15895	2756		

TABLE F-2
 QUANTITY OF WASTE WATER DISCHARGED AND REUSED

SOUTHERN CALIFORNIA
 COLORADO RIVER BASIN REGION (REGION 7)

WATER YEAR 1967-68

DISCHARGER	AVERAGE DISCHARGE RATE IN MGD	VOLUME DISCHARGED IN ACRE-FEET	PORTION REUSED IN ACRE-FEET	TYPE OF REUSE	PLACE OF DISPOSAL FOR WASTE WATER NOT REUSED
BANNING, CITY OF	.444	497	8	IRRIGATION	SMITH CREEK
BLYTHE, CITY OF	.559	626	0		LAND
BRAWLEY, CITY OF	1.151	1289	0		NEW RIVER
COACHELLA SANITARY DISTRICT	.811	908	817	IRRIGATION	WHITewater STORM DRAIN
COACHELLA VALLEY COUNTY WATER DIST (PALM DESERT)	.129	145	85	IRRIGATION	LAND
EAST BLYTHE COUNTY WATER DISTRICT	.285	319	0		LAND
EL CENTRO, CITY OF	1.910	2140	0		CENTRAL MAIN DRAINAGE CANAL
HOLTVILLE, CITY OF	.329	368	0		ALAMO RIVER
IMPERIAL, CITY OF	.602	674	0		DOLSON DRAIN
IMPERIAL VALLEY BOWL	.004	5	0		LAND
KAISER STEEL CORPORATION, EAGLE MOUNTAIN	.463	519	519	INDUSTRIAL	
MECCA SANITARY DISTRICT	.100	112	0		LAND
NEEDLES, CITY OF	.620	694	0		COLORADO RIVER
PALM SPRINGS, CITY OF	2.193	2456	916	IRRIGATION	WHITewater WASH
PIONEERS MEMORIAL HOSPITAL	.050	56	0		NEW RIVER
THERMAL SANITARY DISTRICT	.087	97	0		WHITewater STORM DRAIN
U.S. GYPSUM COMPANY					
DOMESTIC WASTE TREATMENT PLANT	.005	6	0		LAND
INDUSTRIAL WASTE TREATMENT PLANT	.039	44	0		LAND
US MARINE CORPS, TWENTYNINE PALMS	1.153	1292	581	IRRIGATION	LAND
US NAVAL AIR STATION, EL CENTRO	.211	236	0		NEW RIVER
VALLEY SANITARY DISTRICT	2.738	3067	859	IRRIGATION	LAND
TOTAL IN REGION 7	13.883	15550	3785		

TABLE F-2

QUANTITY OF WASTE WATER DISCHARGED AND REUSED

SOUTHERN CALIFORNIA
SANTA ANA REGION (REGION 8)

WATER YEAR 1967-68

DISCHARGER	AVERAGE DISCHARGE RATE IN MGD	VOLUME DISCHARGED IN ACRE-FEET	PORTION REUSED IN ACRE-FEET	TYPE OF REUSE	PLACE OF DISPOSAL FOR WASTE WATER NOT REUSED
BIG BEAR LAKE SANITATION DISTRICT	.174	195	0		LAND
BREA, CITY OF	.030	34	0		LAND
CALIF INSTITUTION FOR MEN, CHINO	.088	99	99	IRRIGATION	
CALIF INSTITUTION FOR WOMEN, FRONTERA	.174	195	0		PRADO FLOOD CONTROL BASIN
CHINO, CITY OF					
PLANT NO. 1	.626	701	574	IRRIGATION	LAND
PLANT NO. 2	1.320	1479	1247	IRRIGATION	LAND
COLTON, CITY OF	2.259	2530	2404	IRRIGATION	SANTA ANA RIVER
CORONA, CITY OF	2.343	2625	0		LAND
CUCAMONGA COUNTY WATER DISTRICT	.789	884	0		LAND
EASTERN MUNICIPAL WATER DISTRICT					
HEMET-SAN JACINTO PLANT	1.314	1472	0		LAND
SUN CITY PLANT	.308	345	0		LAND
SUNNYHEAD PLANT	.004	5	0		LAND
EDGEMONT COMMUNITY SERVICES DISTRICT	.250	280	0		LAND
ELSINORE, CITY OF	.188	211	106	IRRIGATION	LAND
FONTANA, CITY OF	1.985	2224	0		LAND
GLEN HELEN REHABILITATION CENTER	.016	18	0		LAND
IRVINE RANCH WATER DISTRICT	.343	384	384	IRRIGATION	
JURUPA COMMUNITY SERVICES DISTRICT	.544	609	0		SANTA ANA RIVER
LOMA LINDA UNIV., RIVERSIDE CAMPUS	.172	193	193	IRRIGATION	
ONTARIO, CITY OF	9.012	10095	1110	IRRIGATION	LAND
ORANGE COUNTY INDUSTRIAL FARM	.007	8	6	IRRIGATION	LAND
ORANGE COUNTY SANITATION DISTRICTS					
PLANT NO. 1	42.782	47922	0		PACIFIC OCEAN
PLANT NO. 2	75.934	85057	0		PACIFIC OCEAN
REDLANDS, CITY OF	2.075	2324	0		LAND
RIALTO, CITY OF	1.734	1942	0		SANTA ANA RIVER

TABLE F-2

QUANTITY OF WASTE WATER DISCHARGED AND REUSED

SOUTHERN CALIFORNIA
SANTA ANA REGION (REGION 8)

WATER YEAR 1967-68

DISCHARGER	AVERAGE DISCHARGE RATE IN MGD	VOLUME DISCHARGED IN ACRE-FEET	PORTION REUSED IN ACRE-FEET	TYPE OF REUSE	PLACE OF DISPOSAL FOR WASTE WATER NOT REUSED
RIVERSIDE, CITY OF PLANT NO. 1	15.466	17324	0		SANTA ANA RIVER
ROSSMOOR SANITATION, INC.	.983	1101	5	IRRIGATION	LAND
RUBIDOUX COMMUNITY SERVICES DISTRICT	.657	736	297	IRRIGATION INDUSTRIAL RECREATION	LAND
SAN BERNARDINO, CITY OF PLANT NO. 1	6.530	7315	146	IRRIGATION	WARM CREEK
PLANT NO. 2	8.100	9073	0		SANTA ANA RIVER
SEAL BEACH, CITY OF	1.078	1207	0		SAN GABRIEL RIVER TIDAL PRISM
SUNSET BEACH SANITARY DISTRICT	.143	160	0		PACIFIC OCEAN
US AIR FORCE, MARCH AFB MAIN PLANT	.418	468	468	IRRIGATION	
WEST PLANT	.246	276	276	IRRIGATION	
US MARINE CORPS AIR STATION, EL TORO	1.019	1141	571	IRRIGATION	SAN DIEGO CREEK
US NAVAL WEAPONS STATION, SEAL BEACH	.121	136	0		PACIFIC OCEAN
WESTERN PACIFIC SANITATION COMPANY ETIWANDA PLANT	.035	39	0		LAND
VINA VISTA PLANT	.010	11	2	IRRIGATION	LAND
TOTAL IN REGION 8	179.277	200818	7888		

TABLE F-2
 QUANTITY OF WASTE WATER DISCHARGED AND REUSED

SOUTHERN CALIFORNIA
 SAN DIEGO REGION (REGION 9)

WATER YEAR 1967-68

DISCHARGER	AVERAGE DISCHARGE RATE IN MGD	VOLUME DISCHARGED IN ACRE-FEET	PORTION REUSED IN ACRE-FEET	TYPE OF REUSE	PLACE OF DISPOSAL FOR WASTE WATER NOT REUSED
CALIF DIV FORESTRY-CUYAMACA CONSERVATION CENTER	.009	10	0		LAND
CAPISTRANO BEACH SANITARY DISTRICT	.385	431	0		LAND
DANA POINT SANITARY DISTRICT	.145	162	0		PACIFIC OCEAN
DEL MAR, CITY OF	.287	321	0		SAN DIEGUITO RIVER
ENCINITAS SANITARY DISTRICT	.325	364	364	IRRIGATION	
ESCONDIDO, CITY OF PLANT NO. 2	2.931	3283	0		ESCONDIDO CREEK
FALLBROOK SANITARY DISTRICT PLANT NO. 1 (OLD)	.356	399	18	IRRIGATION	LAND
PLANT NO. 2 (NEW)	.048	54	0		LAND
LAGUNA BEACH, CITY OF	1.759	1970	0		PACIFIC OCEAN
LEUCADIA COUNTY WATER DISTRICT	.188	211	211	IRRIGATION	
MOULTON-NIGUEL WATER DISTRICT PLANT NO. 1A	.212	237	0		LAND
PLANT NO. 2A	.086	96	0		LAND
PLANT NO. 3A	.465	521	355	IRRIGATION	LAND
OCEANSIDE, CITY OF BUENA VISTA PLANT	.261	292	292	RECHARGE IRRIGATION	
LA SALINA PLANT	2.800	3136	3136	RECHARGE IRRIGATION	
SAN LUIS REY PLANT	.774	867	867	RECHARGE IRRIGATION	
PAUMA VALLEY COMMUNITY SERVICES DISTRICT	.074	83	0		LAND
POMERADO COUNTY WATER DISTRICT	.207	232	0		LOS PENASQUITOS CREEK
RAINBOW MUNICIPAL WATER DISTRICT PLANT A (GIRD ROAD)	.004	4	4	IRRIGATION	
PLANT B (HWY. 76)	.007	8	0		LAND
PLANT C (SAN LUIS REY)	.003	3	0		LAND
SAN CLEMENTE, CITY OF	1.791	2006	251	IRRIGATION	PACIFIC OCEAN
SAN DIEGO, CITY OF BROWN FIELD PLANT	.033	37	0		LAND
CALLAN PLANT	.462	517	105	IRRIGATION	SORRENTO VALLEY
POINT LOHA PLANT	81.053	90791	0		PACIFIC OCEAN

TABLE F-2

QUANTITY OF WASTE WATER DISCHARGED AND REUSED

SOUTHERN CALIFORNIA
SAN DIEGO REGION (REGION 9)

WATER YEAR 1967-68

DISCHARGER	AVERAGE DISCHARGE RATE IN MGD	VOLUME DISCHARGED IN ACRE-FEET	PORTION REUSED IN ACRE-FEET	TYPE OF REUSE	PLACE OF DISPOSAL FOR WASTE WATER NOT REUSED
SAN DIEGO, CITY OF					
RANCHO BERNARDO PLANT	.376	421	223	IRRIGATION	LAND
SORRENTO PLANT	.461	516	0		SORRENTO VALLEY
SAN DIEGO, COUNTY OF (DEPT. SPEC. DIST. SERVICES)					
ALPINE SANITATION DISTRICT	.032	36	0		LAND
RANCHO DEL CAMPO PLANT	.032	36	0		CAMPO CREEK
ENCINA WATER POLLUTION CONTROL FACILITY	2.462	2758	0		PACIFIC OCEAN
JULIAN SANITATION DISTRICT	.015	17	17	IRRIGATION	
LAKESIDE SANITATION DISTRICT	.465	521	0		LAND
MOUNT PALOMAR AIRPORT	.004	4	0		LAND
RAMONA SANITATION DISTRICT	.131	147	0		LAND
RANCHO SANTA FE SANITATION DISTRICT	.078	87	0		LAND
SAN ELIJO WATER POLL. CONTROL FACILITY	.904	1013	0		PACIFIC OCEAN
VIEJAS HONOR CAMP	.017	19	19	IRRIGATION	
SAN JUAN CAPISTRANO, CITY OF					
	.169	189	0		PACIFIC OCEAN
SAN MARCOS COUNTY WATER DISTRICT					
	.512	573	0		LAND
SAN PASQUAL ACADEMY					
	.021	24	24	IRRIGATION	
SANTEE COUNTY WATER DISTRICT					
	1.300	1456	1456	RECHARGE IRRIGATION INDUSTRIAL RECREATION	
SOUTH LAGUNA BEACH SANITARY DISTRICT					
	.505	566	0		PACIFIC OCEAN
US MARINE CORPS, CAMP PENDLETON					
PLANT NO. 1	.819	917	917	RECHARGE RECREATION	
PLANT NO. 2	.678	759	759	RECHARGE IRRIGATION	
PLANT NO. 3	.375	420	420	RECHARGE	
PLANT NO. 8	.133	149	149	RECHARGE	
PLANT NO. 9	.253	283	283	RECHARGE	
PLANT NO. 10	.147	165	165	RECHARGE	
PLANT NO. 11	.392	439	439	RECHARGE	
PLANT NO. 12	.256	287	287	RECHARGE	
PLANT NO. 13	.530	594	0		SANTA MARGARITA RIVER
PLANT NO. 14	.119	133	0		SANTA MARGARITA RIVER
PLANT NO. 15	.083	93	0		LAND
US NAVAL AIR STATION, IMPERIAL BEACH					
	.115	129	0		TIJUANA RIVER
US NAVAL WEAPONS STATION-FALLBROOK ANNEX					
	.054	60	0		LAND
VALLEY CENTER MUNICIPAL WATER DISTRICT					
VALLEY CENTER (PLANT U-6)	.003	3	3	IRRIGATION	
TOTAL IN REGION 9					
	106.106	118849	10764		

TABLE F-3 MINERAL ANALYSES OF WASTE WATER

An explanation of column headings follows:

- LAB - Laboratory analysis.
- LAB EC - The electrical conductance in micromhos at 25° Celsius.
- FIELD EC - The electrical conductance in micromhos at temperature when sampled.
- LAB & FIELD PH - Measure of acidity or alkalinity of water.
- TDS - Gravimetric determination of total dissolved solids in milligrams per liter. ≠ - Difference between total anions and total cations of over five percent.
- SUM - Total dissolved solids determined by addition of analyzed constituents at 180° Celsius.
- TH - Total hardness.
- NCH - Non-carbonate hardness.
- TIME - Pacific Standard Time on a 24-hour clock basis.
- TEMP - Water temperature in degrees Fahrenheit at the time of field sampling.

The MINERAL CONSTITUENTS are as follows:

- | | | | |
|------------------|---------------|------------------|------------------|
| B | - Boron | MG | - Magnesium |
| CA | - Calcium | NA | - Sodium |
| CL | - Chloride | NH ₄ | - Ammonium |
| CO ₃ | - Carbonate | NO ₃ | - Nitrate |
| F | - Fluoride | PO ₄ | - Orthophosphate |
| HCO ₃ | - Bicarbonate | SIO ₂ | - Silica |
| K | - Potassium | SO ₄ | - Sulfate |

The LAB and SAMPLER agency codes are as follows:

- 1200 - City of Los Angeles Department of Water and Power
4412 - The Metropolitan Water District of Southern California
5050 - Department of Water Resources
5091 - California Department of Public Health
5239 - Long Beach Health Department
5411 - United Water Conservation District
5867 - Fruit Growers Laboratory

TABLE F-3

MINERAL ANALYSES OF WASTE WATER

CENTRAL COASTAL REGION (REGION 3)

DATE TIME	LAB SAMPLER	TEMP	LABORATORY FIELD		MINERAL		CONSTITUENTS		IN NH4	MILLIGRAMS MILLIEQUIVALENTS PERCENT			PER PER PER		LITER LITER VALUE		MILLIGRAMS PER LITER			LITER TH NCH	
			PH	EC	CA	MG	NA	K		CO3	HC03	SO4	CL	N03	P04	F	B	SI02	T05 SUM		
AVILA SANITARY DISTRICT																					
02/13/68	5050	65	6.5	1136	28	28	130	12	41.8	0	155	92	232	2.5	26.0	0.6	0.34	--	785	185	
--	5050	--	--	--	1.40	2.30	5.65	0.31	2.32	0.00	2.54	1.91	6.54	0.04	0.82				670	58	
					12	19	47	3	19	0	21	16	55	0	7						
HIDDEN HILLS MOBILODGE																					
02/08/68	5050	64	7.6	1674	26	110	190	14	0.4	0	449	81	244	155.0	42.0	0.5	0.30	--	1223	518	
1620	5050	--	--	--	1.30	9.05	8.26	0.36	0.02	0.00	7.36	1.69	6.88	2.50	1.33				1084	149	
					7	48	43	2	0	0	37	8	35	13	7						
PISMO BEACH, CITY OF											PISMO BEACH PLANT										
02/07/68	5050	--	6.6	1687	72	55	198	15	16.6	0	359	196	256	47.7	35.0	0.4	0.48	--	1080	406	
0900	5050	--	--	--	3.59	4.52	8.61	0.38	0.92	0.00	5.88	4.08	7.22	0.77	1.10				1069	112	
					20	25	48	2	5	0	31	21	38	4	6						
PISMO BEACH, CITY OF											SHELL BEACH PLANT										
02/15/68	5050	--	6.6	1682	66	57	198	15	19.1	0	295	191	274	72.6	35.0	0.4	0.48	--	1137	399	
1430	5050	--	--	--	3.29	4.69	8.61	0.38	1.06	0.00	4.83	3.98	7.73	1.17	1.10				1074	157	
					18	26	48	2	6	0	26	21	41	6	6						

TABLE F-3

MINERAL ANALYSES OF WASTE WATER

LOS ANGELES REGION (REGION 4)

DATE TIME	LAB SAMPLER	TEMP	LABORATORY FIELD		MINERAL CONSTITUENTS				IN NH4	MILLIGRAMS MILLIEQUIVALENTS PERCENT				LITER LITER VALUE NO3	P04	MILLIGRAMS PER LITER				
			PH	EC	CA	MG	NA	K		CO3	HC03	REACTANCE S04	PER CL			F	B	SI02	T0S SUM	TH NCH
CALIF STATE HOSPITAL-CAMARILLO																				
4/09/68	--	--	8.2	--	84	49	290	13	13.0	--	--	388	282	39.0	--	0.4	0.42	--	1370	411
--	--	--	--	--	4.19	4.03	12.61	0.33	0.72	--	--	8.08	7.95	0.63	--	--	--	--	--	--
CAMARILLO SANITARY DISTRICT																				
4/09/68	--	--	8.4	--	61	31	300	18	4.8	--	--	363	235	--	--	0.5	1.00	--	1315	280
--	--	--	--	--	3.04	2.55	13.05	0.46	0.27	--	--	7.56	6.63	--	--	--	--	--	--	--
FILLMORE, CITY OF																				
1/01/67	5867	--	7.5	2102	148	63	250	--	--	0	500	538	135	0.0	--	--	1.19	--	1634	629
--	5411	--	--	--	7.38	5.18	10.87	--	--	0.00	8.19	11.20	3.81	0.00	--	--	--	--	--	219
2/01/68	5867	--	7.8	2356	170	82	240	--	--	0	437	696	120	51.0	--	--	1.33	--	1796	762
1100	5411	--	--	--	8.48	6.74	10.44	--	--	0.00	7.16	14.49	3.38	0.82	--	--	--	--	--	403
4/01/68	5867	--	7.7	2253	139	61	284	--	--	0	440	612	120	44.0	--	--	1.24	--	1700	598
1000	5411	--	--	--	6.94	5.02	12.35	--	--	0.00	7.21	12.74	3.38	0.71	--	--	--	--	--	237
4/09/68	--	--	8.1	--	138	71	260	17	6.8	--	--	660	113	20.4	--	0.4	1.40	--	1635	637
--	--	--	--	--	6.89	5.84	11.31	0.43	0.38	--	--	13.74	3.19	0.33	--	--	--	--	--	--
LAS VIRGENES MUNICIPAL WATER DISTRICT										MULWOOD PLANT										
4/16/68	--	--	8.2	--	22	21	256	15	0.0	--	--	339	142	27.5	--	0.7	1.00	--	965	141
--	--	--	--	--	1.10	1.73	11.13	0.38	0.00	--	--	7.06	4.00	0.44	--	--	--	--	--	--
LAS VIRGENES MUNICIPAL WATER DISTRICT										TAPIA PLANT										
4/16/68	--	--	8.3	--	81	64	212	7	0.0	--	--	487	128	19.5	--	0.4	0.70	--	1255	466
--	--	--	--	--	4.04	5.26	9.22	0.18	0.00	--	--	10.14	3.61	0.31	--	--	--	--	--	--
LOS ANGELES COUNTY SANITATION DISTRICTS										NO. 26 - SAUGUS										
0/10/67	--	--	--	--	--	--	--	--	--	--	--	--	113	--	--	--	1.75	--	845	--
--	--	--	--	--	--	--	--	--	--	--	--	--	3.19	--	--	--	--	--	--	--
1/09/68	--	--	--	--	--	30	--	--	--	--	--	--	102	--	--	0.6	1.60	--	864	--
--	--	--	--	--	--	2.47	--	--	--	--	--	--	2.88	--	--	--	--	--	--	--
LOS ANGELES COUNTY SANITATION DISTRICTS										WHITTIER NARROWS PLANT										
1/09/68	--	--	--	--	--	--	--	--	--	--	--	113	83	--	--	0.5	0.70	--	557	--
0800	--	--	--	--	--	--	--	--	--	--	--	2.35	2.34	--	--	--	--	--	--	--
2/13/68	--	--	--	--	--	--	--	--	--	--	--	137	91	--	--	--	0.55	--	604	--
0800	--	--	--	--	--	--	--	--	--	--	--	2.85	2.57	--	--	--	--	--	--	--
3/13/68	--	--	--	--	--	--	--	--	--	--	--	146	96	--	--	--	0.56	--	596	--
0800	--	--	--	--	--	--	--	--	--	--	--	3.04	2.71	--	--	--	--	--	--	--
0/10/68	--	--	--	--	--	--	--	--	--	--	--	103	126	--	--	0.7	0.74	--	652	--
0800	--	--	--	--	--	--	--	--	--	--	--	2.14	3.55	--	--	--	--	--	--	--
1/14/68	--	--	--	--	--	--	--	--	--	--	--	130	89	--	--	--	0.59	--	572	--
0800	--	--	--	--	--	--	--	--	--	--	--	2.71	2.51	--	--	--	--	--	--	--
2/12/68	--	--	--	--	--	--	--	--	--	--	--	119	87	--	--	--	0.53	--	554	--
0800	--	--	--	--	--	--	--	--	--	--	--	2.48	2.45	--	--	--	--	--	--	--
MONTALVO MUNICIPAL IMPROVEMENT DISTRICT																				
4/09/68	--	--	8.2	--	146	76	500	18	17.0	--	--	856	364	0.0	--	0.7	1.50	--	2370	677
--	--	--	--	--	7.28	6.25	21.75	0.46	0.94	--	--	17.82	10.26	0.00	--	--	--	--	--	--
OAK VIEW SANITARY DISTRICT																				
4/09/68	--	--	8.3	--	96	39	168	15	13.0	--	--	288	--	3.4	--	--	--	--	1070	400
--	--	--	--	--	4.79	3.21	7.31	0.38	0.72	--	--	6.00	--	0.05	--	--	--	--	--	--
SANITATION, INC. (SIMI)																				
4/16/68	--	--	6.7	--	19	21	295	16	28.0	--	--	355	184	33.1	--	0.5	0.75	--	1035	134
--	--	--	--	--	0.95	1.73	12.83	0.41	1.55	--	--	7.39	5.19	0.53	--	--	--	--	--	--
SANTA PAULA, CITY OF																				
0/09/67	5867	--	7.5	2020	109	34	282	--	--	0	324	362	252	62.0	--	--	1.02	--	1425	412
1000	5411	--	--	--	5.44	2.80	12.27	--	--	0.00	5.31	7.54	7.11	2	--	--	--	--	--	146
1/07/67	5867	--	7.5	2172	113	39	310	--	--	0	346	372	293	31.0	--	--	0.77	--	1584	443
1000	5411	--	--	--	5.64	3.21	13.48	--	--	0.00	5.67	7.74	8.26	0.50	--	--	--	--	--	159

TABLE F-3

MINERAL ANALYSES OF WASTE WATER

LOS ANGELES REGION (REGION 4)

DATE TIME	LAB SAMPLER	TEMP	LABORATORY FIELD		MINERAL		CONSTITUENTS		IN NH4	MILLIGRAMS MILLIEQUIVALENTS PERCENT			PER PER REACTANCE CL	LITER LITER VALUE NO3	P04	MILLIGRAMS PER LITER			TDS SUM	LITER T NC
			PH	EC	CA	MG	NA	K		CO3	HCO3	SO4				F	B	SI02		
SANTA PAULA, CITY OF																				
12/07/67	5867	--	7.6	2172	130	44	322	--	--	0	381	423	292	29.0	--	--	0.78	--	1621	506
100ñ	5411	--	--	--	6.49	3.62	14.01	--	--	0.00	6.24	8.81	8.23	0.47	--	--	--	--	--	192
01/05/68	5867	--	7.7	2395	119	50	332	--	--	0	358	372	338	49.0	--	--	0.81	--	1618	505
100ñ	5411	--	--	--	5.94	4.11	14.44	--	--	0.00	5.87	7.74	9.53	0.79	--	--	--	--	--	205
02/05/68	5867	--	7.3	1905	99	46	250	--	--	0	359	405	160	66.0	--	--	0.85	--	1385	436
100ñ	5411	--	--	--	4.94	3.78	10.87	--	--	0.00	5.88	8.43	4.51	1.06	--	--	--	--	--	142
03/05/68	5867	--	7.7	2443	130	32	360	--	--	0	287	398	377	43.0	--	--	0.71	--	1627	456
100ñ	5411	--	--	--	6.49	2.63	15.66	--	--	0.00	4.70	8.29	10.63	0.69	--	--	--	--	--	222
04/09/68	--	--	8.2	--	102	43	280	14	5.6	--	--	391	255	64.8	--	1.0	0.86	--	1450	432
--	--	--	--	--	5.09	3.54	12.18	0.36	0.31	--	--	8.14	7.19	1.04	--	--	--	--	--	--
SIMI VALLEY SANITATION COMPANY																				
04/16/68	--	--	7.0	--	20	31	285	17	13.0	--	--	331	200	--	--	0.4	0.84	--	1095	172
--	--	--	--	--	1.00	2.55	12.40	0.43	0.72	--	--	6.89	5.64	--	--	--	--	--	--	--
THOUSAND OAKS, CITY OF																				
04/09/68	--	--	6.8	--	28	29	260	14	27.0	--	--	322	172	0.2	--	0.9	0.84	--	1020	182
--	--	--	--	--	1.40	2.38	11.31	0.36	1.50	--	--	6.70	4.85	0.00	--	--	--	--	--	--

TABLE F-3
MINERAL ANALYSES OF WASTE WATER

LAHONTAN REGION (REGION 6)

DATE TIME	LAB SAMPLER	TEMP	LABORATORY FIELD		MINERAL		CONSTITUENTS		IN NH4	MILLIGRAMS MILLIEQUIVALENTS PERCENT			PER PER REACTANCE		LITER LITER VALUE		MILLIGRAMS PER LITER							
			PH	EC	CA	MG	NA	K		CO3	HCO3	SO4	CL	N03	P04	F	B	SI02	TDS SUM	TH NCH				
					BARSTOW, CITY OF					PRIMARY EFFLUENT														
/14/68	5100	--	7.3	2169	138	16	256	16	31.0	0	391	169	390	1.9	72.0	0.7	0.90	--	1236	410				
--	5100	--	--	--	6.89	1.31	11.13	0.41	1.72	0.00	6.41	3.52	11.00	0.03	2.27				1284#	90				
					32	6	52	2	8	0	28	15	47	0	10									
					BARSTOW, CITY OF					OXIDATION POND														
/14/68	5100	--	7.2	1381	79	12	169	14	38.0	0	437	158	129	2.5	48.0	0.6	0.55	--	815	247				
--	5100	--	--	--	3.94	0.99	7.35	0.36	2.11	0.00	7.16	3.29	3.64	0.04	1.52				866#	0				
					27	7	50	2	14	0	46	21	23	0	10									
/19/68	5100	--	7.5	1325	61	20	169	14	20.0	0	381	151	146	5.0	15.0	0.9	0.90	--	855	235				
--	5100	--	--	--	3.04	1.64	7.35	0.36	1.11	0.00	6.24	3.14	4.12	0.08	0.47				791	0				
					22	12	54	3	8	0	44	22	29	1	3									
					US AIR FORCE, GEORGE AFB																			
/18/68	5100	--	7.3	933	42	5	125	14	26.0	0	347	74	64	0.0	45.0	1.2	0.83	--	530	125				
--	5100	--	--	--	2.09	0.41	5.44	0.36	1.44	0.00	5.69	1.54	1.80	0.00	1.42				568#	0				
					21	4	56	4	15	0	54	15	17	0	14									
/26/68	5100	--	7.4	873	38	10	107	12	28.0	0	327	75	54	0.0	42.0	1.0	0.42	--	444	136				
--	5100	--	--	--	1.90	0.82	4.65	0.31	1.55	0.00	5.36	1.56	1.52	0.00	1.33				529#	0				
					20	9	50	3	17	0	55	16	16	0	14									
					US MARINE CORPS SUPPLY CENTERS					YERMO AREA														
/15/68	5100	--	7.4	808	39	9	99	14	11.0	0	198	66	79	56.0	17.0	0.7	1.85	--	449	134				
--	5100	--	--	--	1.95	0.74	4.31	0.36	0.61	0.00	3.24	1.37	2.23	0.90	0.54				490	0				
					24	9	54	4	8	0	39	17	27	11	6									
/19/68	5100	--	7.3	684	46	8	83	8	2.7	0	173	67	74	38.0	8.0	0.8	1.46	--	417	148				
--	5100	--	--	--	2.29	0.66	3.61	0.20	0.15	0.00	2.83	1.39	2.09	0.61	0.25				422	6				
					33	9	52	3	2	0	39	19	29	8	3									

TABLE F-3
MINERAL ANALYSES OF WASTE WATER

SANTA ANA REGION (REGION 8)

DATE TIME	LAB SAMPLER	TEMP	LABORATORY FIELD		MINERAL CONSTITUENTS				IN NH4	MILLIGRAMS MILLIEQUIVALENTS PERCENT				PER PER LITER LITER VALUE		MILLIGRAMS PER LITER				
			PH	EC	CA	MG	NA	K		CO3	HCO3	504	CL	NO3	PO4	F	B	SiO2	TDS SUM	TH NCH
BEAUMONT, CITY OF																				
12/04/67	5868	--	7.5	814	39	17	82	10	--	0	200	40	61	17.0	63.0	0.5	0.06	--	562	167
--	--	--	--	--	1.95	1.40	3.57	0.25	--	0.00	3.28	0.83	1.72	0.27	1.99				428#	3
					27	19	50	4		0	40	10	21	3	25					
03/19/68	5868	--	7.5	815	40	17	100	11	--	0	190	46	77	72.0	56.0	1.1	0.17	--	554	170
--	--	--	--	--	1.99	1.40	4.35	0.28	--	0.00	3.11	0.96	2.17	1.16	1.77				514#	14
					25	17	54	3		0	34	10	24	13	19					
BIG BEAR LAKE SANITATION DISTRICT EFFLUENT																				
03/01/68	5100	--	7.8	689	64	22	37	5	6.3	0	305	44	39	4.3	8.0	1.3	0.25	--	425	250
--	5100	--	--	--	3.19	1.81	1.61	0.13	0.35	0.00	5.00	0.92	1.10	0.07	0.25				382	0
					45	25	23	2	5	0	68	12	15	1	3					
04/15/68	5100	--	7.4	792	68	20	56	6	16.0	0	371	40	40	1.2	27.0	0.7	0.58	--	465	252
--	5100	--	--	--	3.39	1.64	2.43	0.15	0.89	0.00	6.08	0.83	1.13	0.02	0.85				458	0
					40	19	29	2	10	0	68	9	13	0	10					
09/20/68	5100	--	7.7	979	40	33	82	14	35.0	0	454	61	57	1.9	37.0	0.9	0.01	--	554	236
--	5100	--	--	--	1.99	2.71	3.57	0.36	1.94	0.00	7.44	1.27	1.61	0.03	1.17				585#	0
					19	26	34	3	18	0	65	11	14	0	10					
BIG BEAR LAKE SANITATION DISTRICT EAST END OF LAGOON																				
04/15/68	5100	--	8.1	695	69	24	41	5	5.1	0	325	34	39	5.0	8.0	0.5	0.28	--	432	271
--	5100	--	--	--	3.44	1.97	1.78	0.13	0.28	0.00	5.33	0.71	1.10	0.08	0.25				391	4
					45	26	23	2	4	0	71	9	15	1	3					
BIG BEAR LAKE SANITATION DISTRICT WEST END OF LAGOON																				
04/15/68	5100	--	7.7	631	63	24	40	5	2.0	0	317	33	39	5.0	10.0	0.5	0.24	--	401	256
--	5100	--	--	--	3.14	1.97	1.74	0.13	0.11	0.00	5.19	0.69	1.10	0.08	0.31				378	0
					44	28	24	2	2	0	70	9	15	1	4					
CALIF INSTITUTION FOR MEN, CHINO																				
01/30/68	5100	--	7.3	641	45	7	77	11	8.3	0	256	35	36	13.0	--	2.4	0.15	--	--	141
--	5100	--	--	--	2.24	0.57	3.35	0.28	0.46	0.00	4.19	0.73	1.01	0.21					361#	0
					32	8	48	4	7	0	68	12	16	3						
CALIF INSTITUTION FOR WOMEN, FRONTERA																				
10/03/67	4792	75	7.2	650	36	10	82	11	--	0	280	41	46	0.0	--	0.9	0.70	24	480	131
--	--	--	--	--	1.80	0.82	3.57	0.28	--	0.00	4.59	0.85	1.30	0.00					--	0
01/03/68	4792	--	7.4	650	26	7	118	4	--	0	281	38	71	--	--	1.0	0.30	35	520	94
--	--	--	--	--	1.30	0.57	5.13	0.10	--	0.00	4.60	0.79	2.00						--	0
01/30/68	5100	--	7.5	738	33	0	106	8	13.0	0	259	45	71	3.1	13.0	1.2	0.50	--	399	82
--	5100	--	--	--	1.65	0.00	4.61	0.20	0.72	0.00	4.24	0.94	2.00	0.05	0.41				422#	0
					23	0	64	3	10	0	55	12	26	1	5					
07/18/68	5100	--	6.9	681	28	6	100	7	13.0	0	244	55	57	5.0	--	1.6	0.44	--	354	95
--	5100	--	--	--	1.40	0.49	4.35	0.18	0.72	0.00	4.00	1.14	1.61	0.08					393	0
					20	7	61	2	10	0	58	17	23	1						
CHINO, CITY OF PLANT NO. 1																				
01/30/68	5100	--	7.0	1296	69	9	115	18	68.0	0	557	55	82	3.1	56.0	0.8	0.65	--	655	209
--	5100	--	--	--	3.44	0.74	5.00	0.46	3.77	0.00	9.13	1.14	2.31	0.05	1.77				751#	0
					26	5	37	3	28	0	63	8	16	0	12					
07/18/68	5100	--	6.8	1062	60	13	106	17	38.0	0	417	62	84	3.1	62.0	1.1	0.85	--	534	203
--	5100	--	--	--	2.99	1.07	4.61	0.43	2.11	0.00	6.83	1.29	2.37	0.05	1.96				653#	0
					27	9	41	4	19	0	55	10	19	0	16					
CHINO, CITY OF PLANT NO. 2																				
10/09/67	5868	--	7.2	900	52	10	102	19	25.0	0	336	80	82	0.0	--	0.4	0.50	--	531	171
--	--	--	--	--	2.59	0.82	4.44	0.49	1.38	0.00	5.51	1.66	2.31	0.00					537	0
					27	8	46	5	14	0	58	18	24	0	0					
10/31/67	5868	--	6.9	1100	56	7	100	2	33.0	0	400	90	71	12.0	--	0.7	0.90	--	583	169
--	--	--	--	--	2.79	0.57	4.35	0.05	1.83	0.00	6.55	1.87	2.00	0.19					570#	0
					29	6	45	0	19	0	62	18	19	2						
01/08/68	5868	--	7.3	1127	56	10	88	18	43.0	0	415	60	85	0.0	--	0.5	0.70	--	533	181
--	--	--	--	--	2.79	0.82	3.83	0.46	2.38	0.00	6.80	1.25	2.40	0.00					566	0
					27	8	37	4	23	0	65	12	23	0						
01/31/68	5868	--	7.4	965	60	7	99	18	35.0	0	427	28	85	0.0	--	0.3	0.40	--	533	179
--	--	--	--	--	2.99	0.57	4.31	0.46	1.94	0.00	7.00	0.58	2.40	0.00					543	0
					29	6	42	4	19	0	70	6	24	0						
03/04/68	5868	--	7.2	1020	60	10	120	17	55.0	0	372	80	71	0.0	--	0.3	0.70	--	583	191
--	--	--	--	--	2.99	0.82	5.22	0.43	3.05	0.00	6.10	1.66	2.00	0.00					597#	0
					24	7	42	3	24	0	62	17	20	0						

TABLE F-3
MINERAL ANALYSES OF WASTE WATER

SANTA ANA REGION (REGION 8)

DATE TIME	LAB SAMPLER	TEMP	LABORATORY FIELD		MINERAL CONSTITUENTS				IN NH4	MILLIGRAMS MILLIEQUIVALENTS PERCENT			LITER LITER VALUE	PER PER REACTANCE CL	LITER LITER VALUE	MILLIGRAMS PER LITER				
			PH	EC	CA	MG	NA	K		CO3	HCO3	SO4				F	B	SiO2	TDS SUM	TH NCH
COLTON, CITY OF																				
1/04/67	5100	--	7.4	914	69	7	77	13	28.0	0	356	69	60	3.1	--	0.7	0.48	--	508	201
--	5100	--	--	--	3.44	0.57	3.35	0.33	1.55	0.00	5.83	1.44	1.69	0.05					503	0
					37	6	36	4	17	0	65	16	19	0						
CORONA, CITY OF																				
1/05/67	4790	--	7.0	2100	116	19	260	20	43.0	0	421	210	337	6.0	--	0.8	1.90	--	1226	368
--	4790	--	--	--	5.79	1.56	11.31	0.51	2.38	0.00	6.90	4.37	9.50	0.10					1221	23
					27	7	52	2	11	0	33	21	45	0						
1/02/68	4790	--	7.1	2000	112	12	240	18	33.0	0	311	210	334	8.0	--	0.6	1.00	--	1189	329
--	4790	--	--	--	5.59	0.99	10.44	0.46	1.83	0.00	5.10	4.37	9.42	0.13					1122	74
					29	5	54	2	9	0	27	23	49	1						
CUCAMONGA COUNTY WATER DISTRICT																				
1/30/68	5100	--	7.5	791	40	8	94	14	20.0	0	317	42	53	5.0	30.0	0.3	0.75	--	473	133
--	5100	--	--	--	1.99	0.66	4.09	0.36	1.11	0.00	5.19	0.87	1.49	0.08	0.95				463	0
					24	8	50	4	13	0	60	10	17	1	11					
1/31/68	4790	--	7.5	790	44	2	90	17	30.0	0	299	88	71	2.0	--	1.2	0.70	--	540	118
--	4790	--	--	--	2.19	0.16	3.91	0.43	1.66	0.00	4.90	1.83	2.00	0.03					493	0
					26	2	47	5	20	0	56	21	23	0						
EASTERN MUNICIPAL WATER DISTRICT										HEMET-SAN JACINTO PLANT										
1/03/67	--	--	7.6	1247	63	18	147	22	11.0	0	305	144	150	11.1	--	0.5	0.72	--	722	231
--	--	--	--	--	3.14	1.48	6.39	0.56	0.61	0.00	5.00	3.00	4.23	0.18					718	0
					26	12	52	5	5	0	40	24	34	1						
1/02/68	--	--	7.4	1150	62	17	141	17	5.2	0	290	128	128	39.0	--	0.4	0.62	--	692	225
--	--	--	--	--	3.09	1.40	6.13	0.43	0.29	0.00	4.75	2.66	3.61	0.63					681	0
					27	12	54	4	2	0	41	23	31	5						
1/29/68	4790	--	7.2	1300	68	14	134	19	15.0	0	247	130	112	60.0	--	1.7	0.60	--	782	227
--	4790	--	--	--	3.39	1.15	5.83	0.49	0.83	0.00	4.05	2.71	3.16	0.97					676	25
					29	10	50	4	7	0	37	25	29	9						
EASTERN MUNICIPAL WATER DISTRICT										SUN CITY PLANT										
1/02/67	--	--	7.6	1505	74	32	186	23	3.6	0	173	323	182	33.7	--	0.7	0.76	--	969	316
--	--	--	--	--	3.69	2.63	8.09	0.59	0.20	0.00	2.83	6.72	5.13	0.54					944	175
					24	17	53	4	1	0	19	44	34	4						
1/02/68	--	--	7.5	1550	79	30	192	16	11.0	0	204	328	179	1.3	--	0.7	0.60	--	940	321
--	--	--	--	--	3.94	2.47	8.35	0.41	0.61	0.00	3.34	6.83	5.05	0.02					938	153
					25	16	53	3	4	0	22	45	33	0						
1/29/68	4790	--	6.9	1480	76	29	160	19	0.4	0	101	280	149	76.0	--	0.4	0.70	--	927	309
--	4790	--	--	--	3.79	2.38	6.96	0.49	0.02	0.00	1.65	5.83	4.20	1.22					841	226
					28	17	51	4	0	0	13	45	32	9						
EDGEMONT COMMUNITY SERVICES DISTRICT																				
1/23/68	4790	--	7.5	1350	64	14	150	16	35.0	0	290	200	167	0.0	--	0.4	0.60	--	766	217
--	4790	--	--	--	3.19	1.15	6.52	0.41	1.94	0.00	4.75	4.16	4.71	0.00					790	0
					24	9	49	3	15	0	35	31	35	0						
FONTANA, CITY OF										PRIMARY EFFLUENT										
1/10/67	4790	--	7.1	820	50	11	64	15	30.0	0	326	12	67	0.0	--	0.3	0.10	--	494	170
--	4790	--	--	--	2.49	0.90	2.78	0.38	1.66	0.00	5.34	0.25	1.89	0.00					410	0
					30	11	34	5	20	0	71	3	25	0						
1/30/68	5100	--	7.2	1174	64	8	107	14	48.0	0	395	42	140	2.5	25.0	0.6	0.35	--	532	193
--	5100	--	--	--	3.19	0.66	4.65	0.36	2.66	0.00	6.47	0.87	3.95	0.04	0.79				646	0
					28	6	40	3	23	0	53	7	33	0	6					
1/18/68	5100	--	7.2	916	42	13	69	12	43.0	0	351	48	61	5.6	36.0	0.9	0.56	--	403	158
--	5100	--	--	--	2.09	1.07	3.00	0.31	2.38	0.00	5.75	1.00	1.72	0.09	1.14				504	0
					24	12	34	3	27	0	59	10	18	1	12					
GUILD WINE (SUNLAND VINEYARDS)																				
1/18/68	5100	--	7.0	29403	103	18	7640	44	21.0	0	278	30	12000	3.1	17.0	1.4	0.18	--	19295	331
--	5100	--	--	--	5.14	1.48	332.34	1.12	1.16	0.00	4.56	0.62	338.40	0.05	0.54				20015	103
					1	0	97	0	0	0	1	0	98	0	0					
JURUPA COMMUNITY SERVICES DISTRICT										EFFLUENT										
1/21/67	4790	--	7.1	1400	84	24	138	23	35.0	0	393	100	167	0.0	--	0.4	0.90	--	782	308
--	4790	--	--	--	4.19	1.97	6.00	0.59	1.94	0.00	6.44	2.08	4.71	0.00					766	0
					28	13	41	4	13	0	49	16	36	0						
1/08/68	4790	--	7.3	1420	112	10	130	24	35.0	0	372	140	167	13.0	--	0.3	0.30	--	820	321
--	4790	--	--	--	5.59	0.82	5.65	0.61	1.94	0.00	6.10	2.91	4.71	0.21					815	16
					38	6	39	4	13	0	44	21	34	1						

TABLE F-3
MINERAL ANALYSES OF WASTE WATER

SANTA ANA REGION (REGION 8)

DATE TIME	LAB SAMPLER	TEMP	LABORATORY FIELD		MINERAL CONSTITUENTS				IN NH4	MILLIGRAMS MILLIEQUIVALENTS PERCENT				PER PER REACTANCE		LITER LITER VALUE		MILLIGRAMS PER LITER			
			PH	EC	CA	MG	NA	K		CO3	HCO3	S04	CL	NO3	PO4	P	8	SI02	TDS SUM	TN NCH	
KAISER STEEL CORPORATION, FONTANA																					
11/02/67	4790	--	8.2	1710	96	10	190	75	5.0	6	262	260	231	0.0	--	2.4	0.70	--	1077	281	
--	4790	--	--	--	4.79	0.82	8.26	1.92	0.28	0.20	4.29	5.41	6.51	0.00	--	--	--	--	1005	56	
					30	5	51	12	2	1	26	33	40	0							
01/03/68	4790	--	7.5	2000	80	10	240	145	--	0	146	290	288	2.0	--	4.3	0.70	--	1233	241	
--	4790	--	--	--	3.99	0.82	10.44	3.71	--	0.00	2.39	6.04	8.12	0.03	--	--	--	--	--	121	
01/30/68	5100	--	6.2	870	110	15	48	6	0.0	0	20	326	47	30.0	0.0	0.5	0.80	--	641	336	
--	5100	--	--	--	5.49	1.23	2.09	0.15	0.00	0.00	0.33	6.79	1.32	0.48	0.00	--	--	--	594	320	
					61	14	23	2	0	0	4	76	15	5	0						
07/27/68	4790	--	7.1	1650	92	12	140	90	--	0	180	250	220	0.0	--	2.3	1.10	--	922	279	
--	4790	--	--	--	4.59	0.99	6.09	2.30	--	0.00	2.95	5.20	6.20	0.00	--	--	--	--	--	131	
05/20/68	5100	--	7.8	1436	88	12	90	78	29.0	0	154	167	227	25.0	--	2.2	0.75	--	812	269	
--	5100	--	--	--	4.39	0.99	3.91	1.99	1.61	0.00	2.52	3.48	6.40	0.40	--	--	--	--	795	140	
					34	8	30	15	12	0	20	27	50	3							
07/18/68	5100	--	6.7	300	15	9	29	4	0.0	0	32	42	27	33.0	5.0	0.7	1.14	--	185	74	
--	5100	--	--	--	0.75	0.74	1.26	0.10	0.00	0.00	0.52	0.87	0.76	0.53	0.16	--	--	--	182	48	
					26	26	44	4	0	0	18	31	27	19	5						
ONTARIO, CITY OF																					
10/09/67	4790	--	6.8	1120	60	12	102	18	35.0	0	381	60	89	6.0	--	0.6	1.10	--	572	190	
--	4790	--	--	--	2.99	0.99	4.44	0.46	1.94	0.00	6.24	1.25	2.51	0.10	--	--	--	--	571#		
					28	9	41	4	18	0	62	12	25	1							
10/24/67	4790	--	7.2	940	52	12	96	17	30.0	0	372	50	75	10.0	--	0.6	0.90	--	528	170	
--	4790	--	--	--	2.59	0.99	4.17	0.43	1.66	0.00	6.10	1.04	2.11	0.16	--	--	--	--	527		
					26	10	42	4	17	0	65	11	22	2							
11/08/67	4790	--	7.8	840	52	12	86	15	28.0	0	320	44	66	1.0	--	2.4	0.50	--	473	170	
--	4790	--	--	--	2.59	0.99	3.74	0.38	1.55	0.00	5.24	0.92	1.86	0.02	--	--	--	--	465#		
					28	11	40	4	17	0	65	11	23	0							
01/15/68	4790	--	7.5	920	56	24	94	16	33.0	0	366	48	71	0.0	--	1.0	0.80	--	503	230	
--	4790	--	--	--	2.79	1.97	4.09	0.41	1.83	0.00	6.00	1.00	2.00	0.00	--	--	--	--	524#		
					25	18	37	4	16	0	67	11	22	0							
01/30/68	5100	--	7.3	982	57	9	93	13	40.0	0	417	50	71	5.0	22.0	1.1	0.65	--	475	170	
--	5100	--	--	--	2.84	0.74	4.04	0.33	2.22	0.00	6.83	1.04	2.00	0.08	0.69	--	--	--	567		
					28	7	40	3	22	0	64	10	19	1	6						
03/07/68	4790	--	7.9	820	48	34	80	11	50.0	0	357	32	53	0.0	--	0.5	1.40	--	395	260	
--	4790	--	--	--	2.39	2.80	3.48	0.28	2.77	0.00	5.85	0.67	1.49	0.00	--	--	--	--	486#		
					20	24	30	2	24	0	73	8	19	0							
07/18/68	5100	--	7.2	733	59	4	87	11	4.7	0	225	49	64	32.0	33.0	1.1	1.28	--	442	160	
--	5100	--	--	--	2.94	0.33	3.78	0.28	0.26	0.00	3.69	1.02	1.80	0.52	1.04	--	--	--	457#		
					39	4	50	4	3	0	46	13	22	6	13						
REDLANDS, CITY OF																					
11/01/67	4790	--	6.8	960	60	10	114	16	10.0	0	204	120	112	13.0	--	2.0	0.40	--	545	191	
--	4790	--	--	--	2.99	0.82	4.96	0.41	0.55	0.00	3.34	2.50	3.16	0.21	--	--	--	--	558#	24	
					31	8	51	4	6	0	36	27	34	2							
01/30/68	5100	--	7.4	1019	54	8	100	13	40.0	0	349	61	94	3.7	24.0	2.4	0.55	--	591	160	
--	5100	--	--	--	2.69	0.66	4.35	0.33	2.22	0.00	5.72	1.27	2.65	0.06	0.76	--	--	--	573		
					26	6	42	3	22	0	55	12	25	1	7						
07/18/68	5100	--	7.2	906	52	14	92	13	21.0	0	244	106	97	5.0	29.0	1.9	2.02	--	449	180	
--	5100	--	--	--	2.59	1.15	4.00	0.33	1.16	0.00	4.00	2.21	2.73	0.08	0.92	--	--	--	553#		
					28	12	43	4	13	0	40	22	27	1	9						
RIALTO, CITY OF																					
01/30/68	5100	--	7.5	797	49	5	83	10	24.0	0	298	50	60	6.2	--	0.7	1.00	--	425	140	
--	5100	--	--	--	2.44	0.41	3.61	0.25	1.33	0.00	4.88	1.04	1.69	0.10	--	--	--	--	436		
					30	5	45	3	16	0	63	13	22	1							
07/18/68	5100	--	7.2	704	46	6	75	8	20.0	0	283	50	50	5.0	--	1.0	1.21	--	331	130	
--	5100	--	--	--	2.29	0.49	3.26	0.20	1.11	0.00	4.64	1.04	1.41	0.08	--	--	--	--	402		
					31	7	44	3	15	0	65	14	20	1							
RIALTO, CITY OF EFFLUENT																					
11/01/67	4790	--	7.0	690	38	11	74	16	21.0	0	275	60	53	5.0	50.0	0.7	0.80	--	414	140	
--	4790	--	--	--	1.90	0.90	3.22	0.41	1.16	0.00	4.51	1.25	1.49	0.08	1.58	--	--	--	465#		
					25	12	42	5	15	0	51	14	17	1	18						
01/02/68	4790	--	7.0	710	35	9	68	17	20.0	0	214	74	50	6.0	45.0	0.7	0.30	--	351	120	
--	4790	--	--	--	1.75	0.74	2.96	0.43	1.11	0.00	3.51	1.54	1.41	0.10	1.42	--	--	--	431#		
					25	11	42	6	16	0	44	19	18	1	18						
01/30/68	5100	--	7.5	797	49	5	83	10	24.0	0	298	50	60	6.2	--	0.7	--	--	425	140	
--	5100	--	--	--	2.44	0.41	3.61	0.25	1.33	0.00	4.88	1.04	1.69	0.10	--	--	--	--	435		
					30	5	45	3	16	0	63	13	22	1							

TABLE F-3

MINERAL ANALYSES OF WASTE WATER

SANTA ANA REGION (REGION 8)

DATE TIME	LAB SAMPLER	TEMP	LABORATORY FIELD		MINERAL CONSTITUENTS				IN NH ₄	MILLIGRAMS MILLIEQUIVALENTS PERCENT				PER PER LITER		MILLIGRAMS PER LITER																							
			PH	EC	CA	MG	NA	K		CO ₃	HCO ₃	REACTANCE SO ₄	CL	LITER LITER VALUE NO ₃	PO ₄	F	B	SiO ₂	TDS SUM	TH MCH																			
RIALTO, CITY OF																				EFFLUENT																			
3/05/68	--	--	7.5	827	27	19	86	13	31.0	0	337	49	40	56.0	45.0	0.8	1.30	--	468	146																			
--	--	--	--	--	1.35	1.56	3.74	0.33	1.72	0.00	5.52	1.02	1.13	0.90	1.42				534#	0																			
					15	18	43	4	20	0	55	10	11	9	14																								
7/18/68	5100	--	7.2	704	46	6	75	8	20.0	0	283	50	50	5.0	7.5	1.0	1.21	--	331	139																			
--	5100	--	--	--	2.29	0.49	3.26	0.20	1.11	0.00	4.64	1.04	1.41	0.08	0.24				409	0																			
					31	7	44	3	15	0	63	14	19	1	3																								
RIVERSIDE, CITY OF																				PLANT NO. 1																			
10/03/67	4790	--	7.3	1200	60	10	140	16	23.0	0	287	90	160	4.0	14.0	1.5	0.70	--	696	191																			
--	4790	--	--	--	2.99	0.82	6.09	0.41	1.27	0.00	4.70	1.87	4.51	0.06	0.44				661	0																			
					26	7	52	3	11	0	41	16	39	1	4																								
1/30/67	4790	--	7.8	1290	76	17	138	16	33.0	0	305	104	192	6.0	24.0	1.7	0.80	--	743	260																			
--	4790	--	--	--	3.79	1.40	6.00	0.41	1.83	0.00	5.00	2.16	5.41	0.10	0.76				759	10																			
					28	10	45	3	14	0	37	16	40	1	6																								
RUBIDOUX COMMUNITY SERVICES DISTRICT																																							
1/24/67	4790	--	7.7	1420	104	19	126	18	25.0	0	451	120	160	0.0	--	0.4	0.60	--	760	338																			
--	4790	--	--	--	5.19	1.56	5.48	0.46	1.38	0.00	7.39	2.50	4.51	0.00					795	0																			
					37	11	39	3	10	0	51	17	31	0																									
1/07/68	4790	--	7.9	972	104	23	51	4	--	0	278	93	91	36.0	--	0.4	--	--	622	354																			
--	4790	--	--	--	5.19	1.89	2.22	0.10		0.00	4.56	1.94	2.57	0.58					--	126																			
SAN BERNARDINO, CITY OF																				PLANT NO. 1																			
1/20/67	4790	--	7.7	1150	60	12	136	17	20.0	0	244	80	160	0.0	18.0	1.1	0.60	--	700	199																			
--	4790	--	--	--	2.99	0.99	5.91	0.43	1.11	0.00	4.00	1.66	4.51	0.00	0.57				625#	0																			
					26	9	52	4	10	0	37	15	42	0	5																								
1/30/68	5100	--	7.4	1240	75	13	152	14	9.0	0	227	86	189	48.0	25.0	1.1	0.35	--	752	241																			
--	5100	--	--	--	3.74	1.07	6.61	0.36	0.50	0.00	3.72	1.79	5.33	0.77	0.79				725	55																			
					30	9	54	3	4	0	30	14	43	6	6																								
1/08/68	4790	--	7.1	1180	72	7	100	12	15.0	0	198	70	204	0.0	25.0	1.3	0.70	--	653	209																			
--	4790	--	--	--	3.59	0.57	4.35	0.31	0.83	0.00	3.24	1.46	5.75	0.00	0.79				605#	46																			
					37	6	45	3	9	0	29	13	51	0	7																								
1/19/68	5100	--	7.0	967	66	14	107	11	9.9	0	256	72	124	34.0	31.0	1.1	--	--	536	222																			
--	5100	--	--	--	3.29	1.15	4.65	0.28	0.55	0.00	4.19	1.50	3.50	0.55	0.98				596#	12																			
					33	12	47	3	5	0	39	14	33	5	9																								
SAN BERNARDINO, CITY OF																				PLANT NO. 2																			
1/18/67	4790	--	7.4	1080	44	12	100	17	40.0	0	342	76	89	0.0	--	1.3	0.80	--	528	159																			
--	4790	--	--	--	2.19	0.99	4.35	0.43	2.22	0.00	5.60	1.58	2.51	0.00					549	0																			
					22	10	43	4	22	0	58	16	26	0																									
1/20/67	4790	--	7.5	920	48	14	96	17	30.0	0	348	80	85	0.0	15.0	1.2	0.50	--	561	177																			
--	4790	--	--	--	2.39	1.15	4.17	0.43	1.66	0.00	5.70	1.66	2.40	0.00	0.47				558	0																			
					24	12	42	4	17	0	56	16	23	0	5																								
1/30/68	5100	--	7.6	1105	56	11	121	14	33.0	0	342	92	107	5.6	40.0	1.4	0.55	--	515	185																			
--	5100	--	--	--	2.79	0.90	5.26	0.36	1.83	0.00	5.60	1.91	3.02	0.09	1.26				650#	0																			
					25	8	47	3	16	0	47	16	25	1	11																								
1/08/68	4790	--	6.8	1280	56	7	132	16	33.0	0	366	80	101	0.0	28.0	1.5	0.90	--	585	169																			
--	4790	--	--	--	2.79	0.57	5.74	0.41	1.83	0.00	6.00	1.66	2.85	0.00	0.88				636	0																			
					25	5	51	4	16	0	53	15	25	0	8																								
1/19/68	5100	--	7.2	986	59	11	103	15	35.0	0	359	104	85	9.9	50.0	1.4	0.68	--	499	193																			
--	5100	--	--	--	2.94	0.90	4.48	0.38	1.94	0.00	5.88	2.16	2.40	0.16	1.58				652#	0																			
					28	8	42	4	18	0	48	18	20	1	13																								
US AIR FORCE, NORTON AFB																																							
1/29/68	5050	--	6.8	667	57	11	38	4	17.0	0	82	232	12	2.0	--	0.5	0.15	--	413	188																			
133h	5088	--	--	--	2.84	0.90	1.65	0.10	0.94	0.00	1.34	4.83	0.34	0.03					414	120																			
					44	14	26	2	15	0	20	74	5	0																									
WESTERN PACIFIC SANITATION COMPANY																				ETIWANDA PLANT																			
1/20/68	5100	--	7.4	1204	38	8	200	3	0.0	0	162	17	279	5.0	--	0.8	0.10	--	635	128																			
--	5100	--	--	--	1.90	0.66	8.70	0.08	0.00	0.00	2.65	0.35	7.87	0.08					631	0																			
					17	6	77	1	0	0	24	3	72	1																									

TABLE F-3

MINERAL ANALYSES OF WASTE WATER

SAN DIEGO REGION (REGION 9)

DATE TIME	LAB SAMPLER	TEMP	LABORATORY FIELD		MINERAL CONSTITUENTS				IN NH4	MILLIGRAMS MILLIEQUIVALENTS PERCENT				PER PER REACTANCE		LITER LITER VALUE		MILLIGRAMS PER LITER			LITER TOS SUM	N
			PH	EC	CA	MG	NA	K		CO3	HC03	S04	CL	N03	P04	F	B	SI02				
CAPISTRANO BEACH SANITARY DISTRICT																						
10/27/67	--	--	8.2	2190	88	36	310	--	0.6	0	180	380	320	20.0	43.0	--	0.86	21	1360	3		
--	--	--	--	--	4.39	2.96	13.48	--	0.03	0.00	2.95	7.91	9.02	0.32	1.36	--	--	--	1308	2		
--	--	--	--	--	21	14	65	--	0	0	14	37	42	1	6	--	--	--	--	--		
11/03/67	--	--	7.7	2240	100	46	370	20	0.6	0	350	390	380	0.3	12.0	0.8	1.00	32	1630	4		
--	--	--	--	--	4.99	3.78	16.09	0.51	0.03	0.00	5.74	8.12	10.72	0.00	0.38	--	--	--	1525	1		
--	--	--	--	--	20	15	63	2	0	0	23	32	43	0	1	--	--	--	--	--		
07/01/68	--	--	7.3	2200	100	38	300	20	--	0	200	350	320	54.0	--	2.2	0.55	--	1410	4		
--	--	--	--	--	4.99	3.12	13.05	0.51	--	0.00	3.28	7.29	9.02	0.87	--	--	--	--	--	2		
ENCINITAS SANITARY DISTRICT																						
10/12/67	--	--	--	--	--	--	210	--	--	--	--	250	220	0.9	12.0	--	--	--	940	--		
--	--	--	--	--	--	--	9.13	--	--	--	--	5.20	6.20	0.01	0.38	--	--	--	--	--		
11/14/67	--	--	7.6	4800	240	120	610	--	0.1	0	280	320	1400	9.0	0.3	--	0.50	43	3270	10		
--	--	--	--	--	11.98	9.87	26.53	--	0.00	0.00	4.59	6.66	39.48	0.14	0.01	--	--	--	2881	8		
--	--	--	--	--	25	20	55	--	0	0	9	13	78	0	0	--	--	--	--	--		
11/14/67	--	--	8.0	4750	300	90	600	--	0.1	0	220	330	1310	6.0	0.1	--	0.37	46	3420	11		
1120	--	--	--	--	14.97	7.40	26.10	--	0.00	0.00	3.60	6.87	36.94	0.10	0.00	--	--	--	2791	9		
--	--	--	--	--	31	15	54	--	0	0	8	14	78	0	0	--	--	--	--	--		
11/14/67	--	--	8.0	5200	300	130	620	--	0.3	0	260	390	1450	6.0	0.6	--	0.63	44	2950	12		
1455	--	--	--	--	14.97	10.69	26.97	--	0.02	0.00	4.26	8.12	40.89	0.10	0.02	--	--	--	3070	10		
--	--	--	--	--	28	20	51	--	0	0	8	15	77	0	0	--	--	--	--	--		
11/14/67	--	--	8.1	4800	260	120	610	--	0.3	0	260	390	1300	7.5	0.1	--	0.50	44	3340	11		
1510	--	--	--	--	12.97	9.87	26.53	--	0.02	0.00	4.26	8.12	36.66	0.12	0.00	--	--	--	2861	9		
--	--	--	--	--	26	20	54	--	0	0	9	16	75	0	0	--	--	--	--	--		
ESCONDIDO, CITY OF PLANT NO. 2																						
10/31/67	--	--	--	--	--	--	--	--	--	--	--	--	--	14.0	32.0	--	--	--	920	--		
--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.22	1.01	--	--	--	--	--		
11/20/67	--	--	7.1	1600	200	90	180	14	79.0	--	--	220	220	34.0	22.0	1.2	--	--	--	8		
--	--	--	--	--	9.98	7.40	7.83	0.36	1.61	--	--	4.58	6.20	0.55	0.69	--	--	--	1011	--		
--	--	--	--	--	37	27	29	1	6	--	--	38	52	5	6	--	--	--	--	--		
11/29/67	--	--	--	--	--	--	--	--	--	--	--	--	--	34.0	21.0	--	--	--	1380	--		
--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.55	0.66	--	--	--	--	--		
FALLBROOK SANITARY DISTRICT																						
10/27/67	--	--	7.2	1700	84	29	180	16	--	0	250	330	190	2.1	--	1.9	0.86	--	1020	3		
--	--	--	--	--	4.19	2.38	7.83	0.41	--	0.00	4.10	6.87	5.36	0.03	--	--	--	--	--	17		
FALLBROOK SANITARY DISTRICT PLANT NO. 1 (OLD)																						
05/16/68	--	--	7.8	1630	88	28	180	15	--	0	220	350	140	1.1	--	0.2	0.86	--	1060	3		
--	--	--	--	--	4.39	2.30	7.83	0.38	--	0.00	3.60	7.29	3.95	0.02	--	--	--	--	--	11		
FALLBROOK SANITARY DISTRICT PLANT NO. 2 (NEW)																						
05/16/68	--	--	6.8	1650	120	36	160	15	--	0	140	310	220	90.0	--	0.5	0.86	--	1220	4		
--	--	--	--	--	5.99	2.96	6.96	0.38	--	0.00	2.29	6.45	6.20	1.45	--	--	--	--	--	3		
10/27/68	--	--	7.2	1700	84	29	180	16	--	0	250	330	190	2.1	--	1.9	0.86	--	1020	3		
--	--	--	--	--	4.19	2.38	7.83	0.41	--	0.00	4.10	6.87	5.36	0.03	--	--	--	--	--	17		
LEUCADIA COUNTY WATER DISTRICT																						
11/15/67	--	--	7.3	6500	970	100	510	--	0.0	0	230	980	1940	11.0	0.5	--	0.25	46	5530	28		
--	--	--	--	--	48.40	8.22	22.18	--	0.00	0.00	3.77	20.40	54.71	0.18	0.01	--	--	--	4671	26		
--	--	--	--	--	61	10	28	--	0	0	5	26	69	0	0	--	--	--	--	--		
03/14/68	--	--	8.2	3000	130	58	350	--	2.4	0	240	340	570	30.0	15.0	--	1.00	19	1800	5		
--	--	--	--	--	6.49	4.77	15.22	--	0.13	0.00	3.93	7.08	16.07	0.48	0.47	--	--	--	1634	3		
--	--	--	--	--	24	18	57	--	0	0	14	25	57	2	2	--	--	--	--	--		
OCEANSIDE, CITY OF																						
11/30/67	--	--	7.2	1990	100	24	260	17	--	0	250	340	300	0.4	28.0	1.4	0.50	29	1250	3		
--	--	--	--	--	4.99	1.97	11.31	0.43	--	0.00	4.10	7.08	8.46	0.01	0.88	--	--	--	1224	1		
--	--	--	--	--	27	10	60	2	--	0	20	34	41	0	4	--	--	--	--	--		
07/28/68	--	--	7.8	2300	120	22	250	17	--	0	270	350	320	0.3	40.0	1.6	0.63	--	1170	3		
--	--	--	--	--	5.99	1.81	10.87	0.43	--	0.00	4.42	7.29	9.02	0.00	1.26	--	--	--	1255	1		
--	--	--	--	--	31	9	57	2	--	0	20	33	41	0	6	--	--	--	--	--		
OCEANSIDE, CITY OF WHELAN LAKE																						
02/26/68	--	--	7.6	2000	100	32	250	--	24.0	0	270	360	310	4.1	28.0	--	0.63	21	1130	3		
--	--	--	--	--	4.99	2.63	10.87	--	1.33	0.00	4.42	7.49	8.74	0.07	0.88	--	--	--	1263	1		
--	--	--	--	--	25	13	55	--	7	0	20	35	40	0	4	--	--	--	--	--		

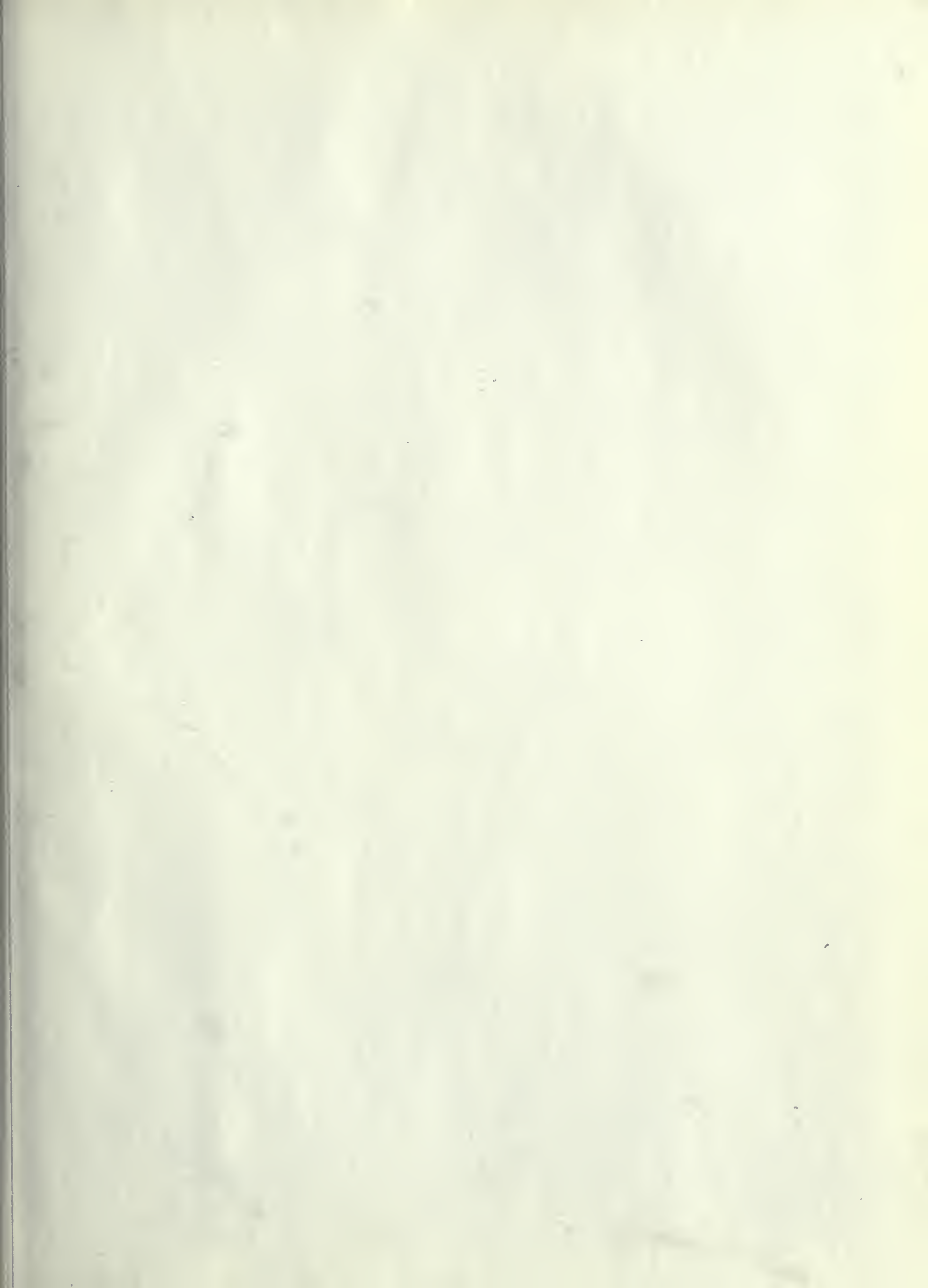
TABLE F-3
MINERAL ANALYSES OF WASTE WATER

SAN DIEGO REGION (REGION 9)

DATE	LAB TIME	TEMP SAMPLER	TEMP	LABORATORY FIELD	PH	EC	MINERAL		CONSTITUENTS		IN	MILLIGRAMS MILLIEQUIVALENTS PERCENT			PER PER REACTANCE		LITER LITER VALUE		MILLIGRAMS PER LITER				
							CA	MG	NA	K		NH4	CO3	HC03	SO4	CL	NO3	P04	F	B	SI02	TDS SUM	TH NCH
				OCEANSIDE, CITY OF										WHELAN LAKE									
12/27/68	--	--	--	7.5	2000		96	39	250	--	23.0	0	260	360	310	3.6	25.0	--	0.63	19	1200	400	
--	--	--	--	--	--		4.79	3.21	10.87		1.27	0.00	4.26	7.49	8.74	0.06	0.79				1255#	187	
							24	16	54		6	0	20	35	41	0	4						
				OCEANSIDE, CITY OF										SAN LUIS REY PLANT									
12/26/68	--	--	--	7.8	2050		100	34	250	--	24.0	0	290	370	320	0.7	29.0	--	0.63	23	1210	390	
--	--	--	--	--	--		4.99	2.80	10.87		1.33	0.00	4.75	7.70	9.02	0.01	0.92				1294#	152	
							25	14	54		7	0	21	34	40	0	4						
12/27/68	--	--	--	7.9	2100		110	41	250	--	15.0	0	280	360	330	8.9	17.0	--	0.88	20	1310	443	
--	--	--	--	--	--		5.49	3.37	10.87		0.83	0.00	4.59	7.49	9.30	0.14	0.54				1291#	214	
							27	16	53		4	0	21	34	42	1	2						
12/28/68	--	--	--	8.4	5950		180	120	860	--	5.7	22	250	420	1630	8.0	6.5	--	0.88	19	3610	943	
--	--	--	--	--	--		8.98	9.87	37.41		0.31	0.73	4.10	8.74	45.97	0.13	0.20				3395#	702	
							16	17	66		1	1	7	15	77	0	0						
POMERADO COUNTY WATER DISTRICT																							
12/25/67	--	--	--	--	--		--	--	--	--	--	--	--	--	380	--	--	--	--	--	1410	--	
--	--	--	--	--	--		--	--	--	--	--	--	--	--	10.72	--	--	--	--	--	--	--	
12/30/67	--	--	--	6.9	2300		100	54	240	--	--	0	180	370	370	62.0	24.0	2.8	0.60	--	1500	472	
--	--	--	--	--	--		4.99	4.44	10.44		--	0.00	2.95	7.70	10.43	2	0.76				--	324	
SAN DIEGO, COUNTY OF (DEPT. SPEC. DIST. SERVICES) ALPINE SANITATION DISTRICT																							
11/13/67	--	--	--	8.2	1350		110	29	160	--	0.4	12	500	35	160	0.8	0.2	--	0.63	51	930	394	
--	--	--	--	--	--		5.49	2.38	6.96		0.02	0.40	8.19	0.73	4.51	0.01	0.01				805#	0	
							37	16	47		0	3	59	5	33	0	0						
01/05/68	--	--	--	7.1	1290		120	30	93	--	0.0	0	340	51	190	5.3	0.1	--	0.13	91	730	423	
--	--	--	--	--	--		5.99	2.47	4.04		0.00	0.00	5.57	1.06	5.36	0.08	0.00				748	144	
							48	20	32		0	0	46	9	44	1	0						
SAN DIEGO, COUNTY OF (DEPT. SPEC. DIST. SERVICES) RAMONA SANITATION DISTRICT																							
11/15/67	--	--	--	7.5	2020		100	19	260	--	27.0	0	460	230	260	0.3	45.0	--	1.00	32	1260	328	
--	--	--	--	--	--		4.99	1.56	11.31		1.50	0.00	7.54	4.79	7.33	0.00	1.42				1201#	0	
							26	8	58		8	0	36	23	35	0	7						
SAN PASQUAL ACADEMY																							
01/15/68	--	--	--	--	1430		31	--	290	--	--	--	--	94	170	--	--	--	--	--	950	--	
--	--	--	--	--	--		1.55	--	12.61		--	--	--	1.96	4.79		--	--	--	--	--	--	
SANTEE COUNTY WATER DISTRICT																							
FINAL EFFLUENT (OLD PLANT)																							
10/12/67	--	--	--	--	--		--	--	230	19	--	--	--	320	190	0.6	35.0	--	--	--	1060	--	
--	--	--	--	--	--		--	--	10.00	0.49	--	--	--	6.66	5.36	0.01	1.10				--	--	
11/12/67	--	--	--	--	--		--	--	230	19	--	--	--	340	210	1.2	29.0	--	--	--	1150	--	
--	--	--	--	--	--		--	--	10.00	0.49	--	--	--	7.08	5.92	0.02	0.92				--	--	
12/15/67	--	--	--	--	--		--	--	190	17	--	--	--	320	220	2.7	32.0	--	--	--	1110	--	
--	--	--	--	--	--		--	--	8.26	0.43	--	--	--	6.66	6.20	0.04	1.01				--	--	
01/14/68	--	--	--	7.8	1790		--	--	190	17	--	--	--	282	270	1.2	31.0	--	--	--	1080	--	
--	--	--	--	--	--		--	--	8.26	0.43	--	--	--	5.87	7.61	0.02	0.98				--	--	
02/27/68	--	--	--	7.3	1800		--	--	210	18	--	--	--	380	250	14.0	37.0	--	--	--	1040	--	
--	--	--	--	--	--		--	--	9.13	0.46	--	--	--	7.91	7.05	0.22	1.17				--	--	
03/1/68	--	--	--	7.5	1850		--	--	200	19	--	--	--	320	280	15.0	37.0	--	--	--	1060	--	
--	--	--	--	--	--		--	--	8.70	0.49	--	--	--	6.66	7.90	0.24	1.17				--	--	
VALLEY CENTER MUNICIPAL WATER DISTRICT																							
LAWRENCE WELKS COUNTRY CLUB VILLAGE																							
01/12/68	--	--	--	--	2070		--	--	300	--	--	--	--	330	340	--	--	--	--	--	1310	--	
--	--	--	--	--	--		--	--	13.05	--	--	--	--	6.87	9.59		--	--	--	--	--	--	

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